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Birds





THE ORNITHOLOGIST.

VOL. 1.

TWIN BLUFFS, WIS., MAY, 1885.

No. 1.

Family Turdidæ: Thrushes.

The thrush has a bill of medium size, straight, the upper mandible convex, its point compressed, notched, and slightly curved downwards, the gape furnished with a few hairs; the nostrils near the base of the bill, oval, partly closed by a naked membrane; the first feather of the wing very short, the third and fourth longest; the tarsus longer than the middle toe, the outer toe connected with the middle toe at base.

The species are numerous and widely distributed, some of them inhabiting temperate and even cold countries, and some only found in tropical regions. Most of the thrushes are migratory.

1. *HYLOCTCHLA MUSTELINA.*

In summer the wood thrush is abundant, in Eastern North America, as far north as Hudson's Bay, retiring to tropical and subtropical regions in winter. During the breeding season its clear but simple song is to be heard among the osier and alder thickets, which embrace the winding streams of our low deep woods, but during the fall and spring more open woods are visited by it. The upper parts of the wood thrush are brownish red, the breast and belly white, thickly interspersed with round black spots.

The nest is usually placed in a low bush or tree, in the situations already mentioned, a few feet from the ground, and is composed of leaves and grass, with a layer of mud, and then a lining of fine rootlets. The eggs four or five in number are greenish blue like those of the robin, but smaller, being 1.00 by .75 inches in size.

2. *HYLOCICHLA FUSCESCENS.*

The haunts and habits of Wilson's Thrush are similar to those of the wood thrush, and like the latter feeds on insects and berries.

The nest is usually built in low shrubs, sometimes on the ground, "and is composed of leaves, dried grass and weeds, lined with fine roots, strips of bark, and often hair."

The four or five eggs usually laid are oval, but vary slightly in shape, and are bluish green in color, a little darker than those of the blue bird, and lighter than those of the catbird. Size .94 by .64 inches.

11. *MIMUS POLYGLOTTUS.*

The mockingbird has a more elongated form than the true thrushes, a longer tail, shorter wings, and the upper mandible more curved at the tips; a little larger than the wood-thrush; the upper parts of a dark brownish ash color, the wings and tail nearly black, the under parts brownish white.

The mocking bird is common in almost all parts of America from southern New England to Brazil, but north of 35° is only a summer resident, while in more southern districts it is common at all seasons.

During the breeding period the mocking bird sings almost incessantly, by night as well as day; through the day it is generally imitative, excelling all other birds in its powers of imitation, by night its song is for the most part natural.

The nest, usually found in thickets and low bushes, is composed of sticks, straws, then a lining of horse dung, and inside of that horse hairs, string, wool &c.

The four to six greenish blue eggs, marked with blotches of yellowish

brown, russet, chocolate, and purple, are in size .97 by .75 inches.

The male is extremely attentive to his mate, and manifests extraordinary courage in driving away enemies from the nest.

Two or three broods are produced in a year.

The food of the mocking bird consist chiefly of berries and insects.

12. GALEOSCOPTES CAROLINENSIS.

The catbird which resembles the mocking bird in vocal powers, is exceedingly abundant in its favorite resorts, the willow and osier thickets, where woods slope into marshes, the brush piles about old clearings, the hazel patches fringing groves, and the tangled hedges that often grow along old fences. In such situations it places a large nest of dry twigs, weeds, &c., without any attempt at concealment, in a low bush, or tree, and there deposits four or five bluish green eggs varying considerably in size being about .97 by .69 inches.

The catbird feeds on fruit, and berries of all kinds, worms and insects.

22. SIALIA SIALIS.

The return of the blue bird, from the southern states, "as the harbinger of spring" is greeted with pleasure, and the "soft agreeable" warble seems to awaken the farmer to a realization that spring work must soon commence.

The confidence and familiarity displayed by the blue bird, in approaching dwellings, makes him a favorite with all.

The upper parts of the blue bird are of a rich sky blue color, the throat and breast are redish chestnut and the belly white. The nest is placed in hollow stumps, holes in trees, or bird houses; the eggs four or five in number are a uniform pale blue, in color, and .80 by .62 inches in size.

The male is very attentive to his mate and both are exceedingly courageous in driving enemies from the vicinity of their nest. Two or three broods are produced each season.

It feeds chiefly on insects, especially on grasshoppers, which it captures upon the wing or upon the ground.

A few Words for the Egg Collector.

The following extract taken from an article by J. M. W., of Norwich, in an old "Ornithologist & Oologist" will answer the queries of many correspondents:

Why do you collect eggs? Do you live in the heart of one of our great cities, with few chances afield, and collect through the mails by purchase and exchange? Do you heap eggs together as curiosities or ornaments to show to friends, or to equal and eclipse the collections of A and B? If you are influenced by these motives, or situated as above indicated, stop where you are! Trouble the birds no longer and turn your attention to bric-a-brac. You are on a lower plane than the crows, grackles and jays who destroy eggs through inherited instinct and appetite. But if you take the field yourself, in search of ruddy health, with a passionate love for your pursuit, with no love of notoriety and without ever a thought of rivalry, then we may not condemn you. Furthermore, if you, hope by comparison of sets and by observations on obscure breeding habits to add a few grains of information to our humble science, go on, yours is no unholy work.—*Young Oologist.*

American Goldfinch.

This bird is known by several names, among which might be mentioned the wild canary, yellowbird,

thistlebird, etc. They arrive here early in May and remain until late in the fall. In size they are as large as our domestic canary. The nest is composed largely of thistle blows, and is placed in trees and bushes from two to ten feet from the ground. Although these birds arrive quite early in the spring, they seldom begin nesting until July, and like other of our smaller birds the period of incubation of the four or five grayish-white eggs is only about a week. This is one of the most beautiful of our summer visitors, and in this section (central New York,) are very common. M. T. J.

—*From Tidings From Nature.*

EXCHANGES.

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The above excellent offers will hold good till the next issue of our little journal June 15th.

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In the future we will devote all necessary space to answering queries.

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L. W. STILWELL, Deadwood, D. T.

THE ORNITHOLOGIST.

VOL 1.

TWIN BLUFFS, WIS., JUNE, 1885.

No. 2.

The Great Auk.

BY T. W. G.

A special interest attaches itself to the Great Auk, from the circumstance that there is no record of its having been taken, or even seen alive, for more than a quarter of a century.

The only record of this rare bird being seen alive is as follows: In the year 1821 Dr. Fleming while on a cruise through the Hebrides, observed and described one which had been taken alive in the sea off St. Kilda and put on board the yacht. With a rope attached to one of its legs, this specimen was occasionally allowed to disport itself in the water. This one was lost while bathing, by the rope breaking. Another one was seen a few years before off Papa Westre, one of the Orkney Islands, but in spite of the exertions of the crew of a six-oared boat for several hours, it escaped; a while afterwards this same specimen was taken, and is now in the British Museum. The Great Auk measures three feet in length, has a large bill, but wings so small as to be useless for flying, but very powerful swimming organs. It laid but a single egg on the bare rock close to the waters edge. This bird being extinct gives special value to the remains now existing. They are as follows: about 72 skins, 9 skeletons, about 71 different bones, and 65 eggs. Two of the eggs were sold in an auction room in Edinburgh, for \$16. They were afterward sold in London, one for five hundred dollars, and the other for 102 guineas.—*The Exchange.*

A Water Turkey.

A correspondent of *Forest and Stream*, hunting on Indian River, Florida, thus describes the snake-bird or water-turkey.

On the left are islands innumerable, with tortuous channels between them, and woe betide the unlucky boatman who gets lost in the labyrinth of their intricate windings.

The islands are green to the water's edge with mangrove bushes, and the scene is enlivened by the numerous water fowl, egrets, herons, pelicans, gallinules, water-turkeys, cormorants and fish-crows, feeding near the islands, and the gulls, terns, vultures, ospreys and man-o'-war hawks, swooping, skimming and sailing in the air above.

"Look, what a queer snake!" suddenly exclaimed Frank, as he seized his gun.

We saw a snake apparently wiggling out of the water several feet into the air near one of the islands. As Frank fired, part of the snake dropped on the water, while the other part took wing and flew away.

"Did the snake drop the bird, or the bird drop the snake?" asked Frank.

"Yes, that was about the way of it," observed Ed.

The explanation was quite simple. A snake-bird, or water-turkey (*Plotus anhinga*), swimming with his long neck only out of water, had the snake in his bill, which he dropped and flew away when Frank fired his gun.

Sidney Lanier's description of this bird is quite characteristic:—

"The water-turkey is the most preposterous bird within the range

of ornithology. He is not a bird, he is a neck, with such subordinate rights, members, appurtenances, and hereditaments thereunto appertaining as seem necessary to that end.

"He has just enough stomach to arrange nourishment for his neck just enough wings to fly painfully along with his neck, and just big enough legs to keep his neck from dragging on the ground; and his neck is light colored, while the rest of him is black."

A Bird Story.

Several years ago a merry son of sunny Italy conceived the idea of educating a number of pet birds which he owned. It was his aim to instruct his feathered pupils to perform feats hitherto unattempted and unthought of by bird-trainers. With the patience peculiar to his people, Sig. Galletti set about his self imposed task. His "bird family," as he was pleased to call them, was composed of parrots, paroquets, and cockatoos. For several months the young Italian labored with his proteges, admitting no one to his rehearsals, and permitting no person outside of his immediate family to know the secret of how he employed his time. After many months of weary, patient toil Sig. Galletti announced to the citizens of the small village in which he lived that on a certain Saturday at a certain hour, he would furnish them an entertainment in a corner building which would prove to them that birds were the possessors of as much intelligence as were some persons. On the day mentioned a large crowd of the rustic and incredulous villagers assembled at the corner and joked and chaffed each other about coming there to be humbugged. Promptly at the striking of the hour, however, the doors of the building were thrown open and the crowd ad-

mitted. They beheld a handsome little stage with scenery which had been erected at the extreme end of the apartment. As soon as the assemblage became quiet Sig. Galletti introduced his company of little feathered performers, who proceeded at once to enact a melodrama with such precision that the innocent rustics viewed their fellow-townsmen with feelings of mingled awe and wonder. During the progress of the drama a castle was stormed and a persecuted princess was rescued. A great conflagration also took place, which was finally extinguished by the brave firemen, who rushed madly to the scene with engine and hook and ladder. Other marvelous things occurred during the progress of the play, and at its conclusion the villagers, mystified beyond expression, wended their way homeward to tell their astonished neighbors of the great exhibition which they had witnessed. Sig. Galletti, well pleased with his success, took his little feathered family and went to England with them; from there he came to America, where he has exhibited in all the principal cities, and wherever shown his birds have immediately become universal favorites, especially with the ladies and children.

A Morning Scene.

One wintry morning recently I happened upon a charming bit of nature that would have captured the heart of a stoic. It had been snowing for some time, and the common was beautiful in its fleecy white mantle. At the foot of a large tree near one of the cross walks was a paper of crumbs nearly buried under the fast-falling snow and on an overhanging limb I counted twenty-seven sparrows. One after another flew down for a crumb, then back again, and in a moment there was a perfect con-

cert of twitterings, subsided presently, to be repeated after the next bit was eaten. By and by the crumbs were all gone, but the little fellows—every one of the twenty-seven—remained to give a charming little concert of thanks, then flitted away.
—*Boston Home Journal.*

Painted Bunting or Nonpareil.

(PASSERINA CIRIS.)

This bird is one of the migratory tribe wintering in South America and the West India Islands. It is one of the handsomest birds we have, beautiful in plumage and rich in color, besides having a very pleasant song. It generally arrives at Savannah by the 14th of April. I have never seen them any earlier, and have watched them for years. They commence to build early in May; I have found their nests as early as May 7th, with eggs; they build a neat nest composed of paper, rags, withered plants, leaves, etc., lined with fine fibrous roots and sometimes horse-hair. They have no regular place to build, as you will find them in the smallest bushes to the largest trees. I know of no bird that the collector needs to watch more than he does the Painted Bunting. At first sight the female looks a great deal like some of the Warblers and Vireos, and the eggs vary a great deal in size and markings, but the general type is white, with red, amber, purple and lilac shadings. Last summer, while out collecting, I found a nest in a small pine sapling, about four feet from the ground; it contained four eggs so thickly marked with ferruginous dottings, as to appear that color. As I was somewhat doubtful about its identity, I concealed myself near by to watch; I had not long to wait before the bird came and went on the nest; I shot it, and it proved to

be a female Painted Bunting. I have often found two and three nests in the same tree, placed in the moss; I have collected as many as forty eggs of this species in one afternoon. Another striking thing about this bird is, that it will very often build its nest on top of another Bunting's nest. I cite a case here: On June 23d, 1883, I found a nest which contained one egg and one young bird; the whole structure was about eight inches long outside, and only about two and one-half inches deep inside.

I was somewhat surprised, and thought it strange that the nest should be so long and yet so shallow, so I took the egg and young bird out and laid them on the ground, and commenced to pull the nest apart, when I found another perfect nest, which contained three eggs slightly incubated, and upon the ground underneath the nest, among the leaves, I found two more eggs which doubtless had fallen from the top nest, as incubation was far advanced. I have often found eight eggs in one nest, thus leaving little doubt that two birds sometimes lay in the same nest. I have found nests with eggs as late as July 20th, so I think they must rear two, if not three broods during the season.

TROUP D. PERRY,

Savannah, Ga.

—*The Young Oologist.*

A Rare Bird.

Capt. R. B. Baxter and Prof. D. Q. Abbott went out on a bird hunt Saturday morning last, and the captain succeeded in killing a white robin. It was beautiful bird with white back, tail, wings, and head and a red breast. It was a the only one of the kind ever seen here.—*Sparta (Ga.) Ishmaelite.*

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Notes.

A small collection, if prepared by ourselves, is to us, an object, of greater pride, and more worth than the finest collection in the world.

We send out, this issue, a large number of sample copies. If you should receive two copies, or do not care for the copy you do receive, please hand it to some friend interested in ornithology and request them to send in their sub's at once.

The most prolific of American birds is the English Sparrow, its nest can be found during at least two thirds of the months in a year. La Grande Southworth, Otsego Co., N. Y., writes, that he found a nest containing three young on the 18th of October.

Y. O.

From a number of clippings sent us by a subscriber we copy the following: "A quails nest was found some time since, on a farm, near Hutchinson, Kan., and among her brood were two plymouth rock chickens. She has, strange to say, forsaken her own offspring and gone with the adopted ones."

Many Thanks.

We most sincerely thank our patrons, for the kind reception given our little paper, and will endeavor to show our appreciation of their generosity, by making THE ORNITHOLOGIST as useful and instructive, as possible. We have secured the aid of several prominent collectors, and others interested in natural History, and hope to present our readers with many excellent articles during the coming year.

Our Table.

No. 149 of the Elzevir Library, A red-headed Family, by Maurice Thompson, has been received from the publisher, John B. Alden, 393 Pearl Street, New York. In this little book Mr. Thompson gives a pleasing account of his acquaintance with "The great king of the red-head family," *Campephilus principalis*, price 3 cents. Have also received from Mr. Alden the April No. of The Book Worm, containing The Lamp of Memory, "A specimen chapter from one of the most popular works of John Ruskin." It is a valuable literary magazine, and only 25 a year.

The *Young Mineralogist and Antiquarian*, is replete with matter of interest to those for whom it is published. Single number 8 cents; 75c. per year. Published monthly by T. H. Wise Wheaton, Ill.

Tidings from Nature, a leading, 16 page paper on natural history, published by H. Mertoun Downs, Rutland, Vt. 40 cents per annum.

A catalogue of birds eggs containing some rare bargains for collectors, from A. M. Shields, 330 Main St., Los Angeles, Cal. And many others which our limited space will not permit us to mention this time. Eds. please accept thanks for same.

The American Ostrich.

RHEA AMERICANA.

The Nandu differs from the ostrich, proper, in having the head and neck covered with feathers; the feet furnished with three toes and each toe armed with a claw; also, in having no tail; and in having better plumed and better developed wings, terminated by a hooked spur. The Nandu is considerably smaller than the ostrich standing only about five feet high. They are of a uniform gray color, except in the back, which has a brown tint. The female is smaller and lighter colored than the male. The feathers of the back and rump, though elongated, possess none of the beauty of the African ostrich, and are but little esteemed as articles of dress and ornament, being employed only in the manufacture of light brushes for driving away flies, or cleansing articles from dust. This bird inhabits the great grassy plains of Buenos Ayres, and the adjoining country, abounding on the banks of the Río de La Plata, and its tributaries and as far south as 42 degrees or 43 degrees.

It is usually seen in small troupes, and runs with great celerity using its wings as aids. Their food consists mainly of grasses, roots, and other vegetable substances, but they will occasionally eat animal food, coming down to the mud-banks of the river to pick up the small fish, which have been stranded on the shallows. Darwin, who had frequent opportunities of observing this bird, has given an excellent account of their habits. He says: "They take to the water readily, and swim across broad and rapid rivers and even from islands in the bays. They swim slowly, with the greater part of the body immersed and the neck extended a little forward. On two occasions I saw some ostriches swimming across the Santa Cruz

river, where it was 400 yards wide, and the stream rapid." It is polygamus; the male bird prepares the nests, collects the eggs, (which are frequently laid by the females at random on the ground) and performs all the duties of incubation. Darwin says four or five females have been known to lay in one nest, and the male when sitting lies so close to the ground, that he himself nearly rode over one. During incubation they are very fierce, and have been known to attack a man on horse-back, trying to kick and leap upon him.

Though shy and wary, the nandu is successfully hunted by the indians, generally on horse-back.

The stomach of the ostrich is celebrated for its incredible power of digestion. The abundance of pepsin to which it owes this faculty has created among the indians a curious commercial fraud. They dry it and sell it literally for its weight in gold. It is used for the purpose of restoring worn out stomachs. In the Argentine Republic ostrich pepsin is prescribed by medical men, and is known by the public as *pepsina nostra*. "A good wine is made by digesting the stomachs in wine."

The Nandu is capable of domestication, and the flesh of the young is not unpleasant.

The Rhea Darwinii, a smaller and more recently discovered species, has light brown plumage each feather tipped with white. It inhabits Patagonia.

A third species, Rhea machrorhyncha, is distinguished by its large bill. Selected.

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How Birds learn to Sing.

Bradford Torrey, in the *Atlantic*: With all this strong tendency on the part of birds to vary their music, how is it that there is still such a degree of uniformity, so that as we have said, every species may be recognized by its notes? Why does every red-eyed vireo sing in one way and every white-eyed vireo in another? Who teaches the young chipper to trill and the young linnet to warble? In short, how do birds come by their music? Is it all a matter of instinct, inherited habit, or do they learn it? The answer seems to be that birds sing as children talk—by simple imitation. Nobody imagines that the infant is born with a language printed upon his brain. The father and mother may never have known a word of any tongue except the English, but if the child is brought up to hear only Chinese he will infallibly speak that and nothing else. And careful experiments have shown that the same is true of birds. Taken from the nest, just after they leave the shell, they invariably sing, not their own so-called natural song, but the song of their foster parents; provided, of course, that this is not anything beyond their physical capacity. The notorious house sparrow (our English sparrow), in his wild or semi-domesticated state, never makes a musical sound; but if he is taken in hand early enough he may be taught to sing, so it is said, nearly as well as the canary. Bechstein relates that a Paris clergyman had two of these sparrows which he had

trained to speak, and among other things, to recite several of the shorter commandments, and the narrative goes on to say that it was sometimes very comical when the pair were disputing over their food, to hear one gravely admonish the other: "Thou shalt not steal!" It would be interesting to know why creatures thus gifted do not sing of their own motion. With their amiability and sweet peaceableness they ought to be caroling the whole year round.

Birds sing by imitation, it is true, but, as a rule, they imitate only the notes which they hear during the first few weeks after they are hatched. One of Mr. Barrington's linnets, for example, after being educated under a titlark, was put into a room with two birds of his own species, where he heard them sing freely every day for three months. He made no attempt to learn anything from them, however, but kept on singing what the titlark had taught him, quite unconscious of anything singular or unpatriotic in such a course. This law, that impressions received during the immaturity of the powers become the unalterable habits of the after-life, is perhaps the most momentous of all the laws in whose power we find ourselves. Sometimes we are tempted to call it cruel. But if it were annulled it would be a strange world. What a hurly-burly we should have among the birds! There would be no more telling them by their notes. Thrushes and jays, wrens and chickadees, finches and warblers, all would be singing one grand medley.

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THE ORNITHOLOGIST.

VOL. 1.

TWIN BLUFFS, WIS., JULY, 1885.

No. 3.

Deceived by a Mocking-Bird.

[N. Y. Exchange.]

In a second-story window of a dwelling in Fifth avenue, Brooklyn, around the corner from the Flatbush avenue depot of the Long Island Railroad, and overlooking the watering-place for the horses on ex-Deacon Richardson's Seventh and Fifth avenue horse-car lines, hangs a talented mocking-bird in a cage. It pipes all day, and keeps it up until late at night. Regular passengers on the horse-cars have learned to look for the bird's notes. It whistles like a master for his dog, chirps like a robin predicting rain, clucks like a hen with her brood, and squeaks like a hurt chicken. Of late it has learned to imitate the whistles which conductors on the open horse-cars use.

To the grief of the hostler with the water pails, the bird succeeds to perfection in deceiving the horses. The water supply is kept in three pails on a low bench placed between the tracks. To save time both of the horses are watered simultaneously by two men who hold the full pails of water to the horses' mouths. When the horses' thirst is satisfied the conductor sounds the whistle twice, and the driver loosens the brake. Then the horses start. Now, while yet the horses' noses are in the water pails the bird sounds two whistles.

The horses, taken by surprise, and expecting the whip if they delay, tip the pails of water over the hostlers with their noses and plunge forward. Of course they can not go ahead, for the break is on, and they are held back to finish their drink, but the air assumes a blue tinge,

owing to the picturesque profanity of the driver and hostlers.

The Meaning of an Old Rhyme.

"Four and twenty blackbirds baked in a pie" is a very old nursery rhyme. These are the four and twenty hours of the day; the "pie" is the space between the earth and the sky, the flat-looking ground being the bottom crust, the birds in between, and the sky being the concave to the crust.

"When the pie was opened" means when day began to break. "The king in the parlor counting out money"—the king is the sun, the monarch of day. There he is enthroned in the sky. He is said to be counting out money, because the sunshine is gold-color. See how he flings about him the beautiful golden sunshine!

"The queen up-stairs eating bread and honey." Of course, if the king is the sun, the queen is the moon. "The maid in the garden hanging out clothes." This maid is Aurora, the goddess of the dawn. Now "Up jumped a little bird and nipped off her nose." This naughty little bird is the first hour, for Aurora, or dawn, disappears as soon as the sun arises.

A Companion for the "Weeping Willow."

In the island of Goa, near Bombay, there is a singular vegetable called the "Sorrowful Tree," because it flourishes only in the night. At sunset no flowers are to be seen, and yet after half an hour it is full of them. They yield a sweet odor, but the sun no sooner begins to shine upon them than some of them fall

off and others close up, and thus it continues flowering in the night during the whole year.—*Boston Budget.*

HIS PET.

A pigeon which for six years was a pet of the late Thurlow Weed for a long time showed in a touching way appreciation of the loss of his master. Not long since a gentleman called at the house, and the pigeon alighted on his shoulder, cooed, peered into the stranger's face, and then flew into an adjoining room.

"He has done that to every gentleman that has come into the house since father died," said Miss Weed, with a sigh.

"He takes most kindly to Gen. Bowen, who visits me occasionally, and who has been in feeble health some time and walks slowly.

"The bird will coo and fly to the general's shoulder, but when he sees that it is not my father, he will stop his cooing and find some other perch.

"Since the day that father's remains were carried away, the affectionate creature has been seeking for his master. He flies through every room in the house, and fairly haunts the library where father spent most of his time with his pet.

"He will tread over every inch of space on the lounge and then go to the rug over which he will walk repeatedly, as if in expectation of his dead master's coming.

"He invariably does this at meal-times, when our table is set in the back-parlor, of which we now make dining room. He can see our table from the rug."

"Then you do not put him in a cage?"

"Oh, never," was the response. "The run of the house has been his since he came into it. Other pigeons come into our yard frequently, and our pet sometimes joins them. He seldom remains long with them

but comes back through one of the windows and begins his search through the house for my father." — *Our Dumb Animals.*

Utilizing the Owl.

It is well known that crows, buzzards, ravens, and other similar birds attack all owls, even the largest, in the day time, as they are well aware that the bright daylight blinds owls to such an extent that it is impossible for them to defend themselves, and for this reason the huntsman uses a chained owl for attracting crows and other birds that he wishes to destroy. The owl is chained on an upright post or rod provided with a crotch or platform on which the bird can sit. This post or rod is connected with a rope or chain passing over suitable pulleys and extending to a hut, so that by pulling the rope or chain the support or platform on which the owl rests can be moved up or down, thus causing the owl to move about, flap his wings, and create a commotion to attract the other birds. A short distance from this post a low shanty or hut is erected, the side toward the post, on which the owl is chained being provided with small openings, through which the barrels of the guns can be thrust. The hut should be erected at the base of a large tree, as many birds of prey prefer to take a short rest before attacking their enemy, the owl.

A short time after the owl has been chained, it is surrounded by a flying mob that begins to bother and pester it, the large birds being very bold and audacious in their attacks. The hunter in the shanty or hut can take good aim, and kill a very large number of birds in a very short time, for it seems that the killing of some of the birds does not disturb the rest, and those dispatched by the hunter are immediately replaced by others.—*Scientific American.*

The Coot.

The American or cinereous coot is about 14 inches long with an extent of wing of 25 inches; bill long, the beak $1\frac{1}{2}$ inches: weight about one pound. The head is small, neck slender, body rather full; feet strong tibia bare a little above the joint; the plumage is soft and blended. The bill is grayish white with a spot near the end; the general color of the upper parts is a deep bluish gray, blackish on the head and neck, and olivaceous on the shoulders. They are found through North America, in New England in the autumn, retiring south in November. Their favorite resorts are the borders of ponds and rivers lined with thick reeds, to which they fly on approach of danger. They swim, dive, fly, and run well, but rise however with difficulty, fluttering with the wings and striking with the feet to assist. They feed especially in the morning and evening near the edge of the water, and in the open lands bordering on streams and lakes. The food consists of aquatic insects and plants, mollusks, small fish, worms, seeds, and tender grasses and leaves. They probably breed in the Northern States; the nest, built of decayed vegetable matter and sticks, is placed near the water among the reeds. It is sometimes carried away by inundations, when it floats without injury to the eggs or displacing the female. The eggs are from seven to ten in number, of an ash-gray color, spotted minutely with black, and the young take to the water as soon as hatched. A common name for this species is the mad hen. They are abundant in New Orleans market in winter, and are much used as food for the poorer classes, who skin instead of plucking them. In New England the name of "coot" is improperly applied to several species of duck,

among them the Scoter duck, etc.—
[*Tidings from Nature.*]

Yellow-breast Chat.

(ICTERIA VIRENS.)

This beautiful and handsome species has nothing but its rich plumage to recommend itself to our notice, having no sweet song to cheer you with while rambling through the woods. But for all that they are an attractive species, and I for one would sadly miss them if they should fail to pay their annual visit. They are migratory, arriving from farther south where they winter, about the 10th of April and I can assure you they generally make their arrival known by their constant chattering which they keep up all day long and often far into the night. They commence to build about the 25th of April, as I have found their nest with eggs as early as May 9th, Incubation advanced. They build a compact nest (scarcely more than four feet from the ground) composed outwardly of grass and bark from the grape vine, lined with fine roots and dry grass. Lay four whitish eggs speckled with reddish brown spots. For three consecutive years I have found a nest of this species in the same spot and on the same day of the month and same number of eggs, three, in it.

They seem to prefer the myrtle bushes to others to build in, at least I have found it so, as I have found them oftener in them than in any others. They are a very jealous bird, hating for any one to intrude on their haunts, chattering and and scolding as long as you are in sight. I know they raise two, if not three broods during the season, as I have found their nests as late as July 17th with fresh eggs.

T. D. P.

Savannah, Ga.

—*The Young Oologist.*

THE ORNITHOLOGIST.

A Monthly paper of Natural History.

Especially devoted to the study of Birds, their nests and habits.

Edited by **C. L. McCOLLUM,**
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NOTES.

The specific gravity of a fresh laid egg is between 1.0784 and 1.0492. Older ones are less.

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From a western paper we find that a goose egg weighing ten ounces has been on exhibition at Vallejo, Cal.

EVERY COLLECTOR should have in his cabinet a specimen of the Arizona silicified wood, both the plain, and the polished. It is the prettiest thing in the mineral line. No agate can boast of the brilliant hues this wood possesses. The silicification must have been a sudden phenomena, as the natural juices of the woods seem to have aided in the production of the numerous shades. Some of the reds, and yellows, are very intense, and frequently over 8 shades can be found in one piece.

W. S. BEEKMAN,
West Medford, Mass.

In some parts of the state of California the Humming-birds are very numerous, and, on sunny days, may be seen in all of their tropical splendor, buzzing about among the flowers in search of their food. The nest of the Humming-bird is nearly as beautiful as the bird itself, and displays an amount of exquisite workmanship that would seem well calculated to put to shame the owners of more rudely constructed nests. The dainty little hummer usually places its nest on a small limb or twig somewhere between eight or twelve feet from the ground; although I have known eccentric members of the humming-bird family to construct their downy little homes as high as twenty and even as low as five feet above the ground. In my locality they seem to consider one tree as good as another when building their nests; I have found them in the eucalyptus, live-oak, cyprus, pine, and various fruit trees. About the best way to discover them is to patiently watch a female bird until she goes to her nest. This requires sharp eyes and not a little patience, as the bird you have your eyes on may have its nest at a distance, or have none at all.—H. R. Taylor in *Young Oologist*.

OUR TABLE.

Our limited space will not allow us to notice each publication separately, but the publishers, all have our most hearty thanks and best wishes.

The Museum, published in the interests of the Young Naturalists and Collectors; of all classes, is a highly creditable journal, from 1220 Sansom street Phila., at \$1.50 per year.

The Oologist’s Directory, a 36 page, 8 vo, is bound in Japanese antique cover, and contains the names of over 400 N. A. Collectors.

No. 1 of *The Story Teller*, from John B. Alden, 393 Pearl St. New York, contains two very interesting stories. "It will give during the year a rich 25 cent's worth of pleasant recreative reading, and besides," promises to keep subscribers well informed in regard to the literary revolution.

To each of the first five persons sending us 10 new subscribers before Nov. 15th 1885 we will send, a ten dollar collection of rare eggs, one copy of F. H. Lattin's hand book, one copy of Davis & Baker's Oologist's Directory, and a price list of birds eggs. To the next five we will present a \$5.00 collection, the guide and hand book, Directory and price list.

The stormy petrel possesses a very large amount of oil, which when terrified, it has the power of throwing from its mouth. In the Faroe Islands the people draw a wick through its body, when it is young and fat, and lightening the end that projects from the beak use for a lamp. It will burn a long time.

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The Condor.

The great vulture of the Andes is the largest of known birds. The wings when extended measure from tip to tip nine to fourteen feet, and it is from four to six feet from the beak to the tip of the tail. The tail is short and wedge shaped; the general color a grayish black, which is

brightest in old males; the young being a brownish color; the wings are marked with white, and a collar of downy white feathers encircles the neck, above which the skin is bare and exhibits many folds. A large cartilaginous comb crowns the head of the male condor and the neck is furnished with a dilatable wattle. The beak of the condor is thick and strong, straight at the base, but the upper mandible strongly curved at the extremity.

The condor feeds on carrion and is very voracious.

"Tschudi mentions one in confinement at Valpariso which ate eighteen pounds of meat in a single day, and seemed to have as good an appetite as usual the next day." Condors often gorge themselves so that it is impossible to fly, and while in this condition they are frequently captured by the indians, with their lassoes. When they feel the noose tighten about their necks they endeavour to throw up the food they have swallowed, but are secured before they can do so. The natives of the Andes assert that the condor builds no nest, but lays its eggs on solid rocks ten or fifteen thousand feet above the level of the sea, where they are usually seen in small groupes.

The male condor performs the greater part of incubating, the indolent female sitting on the nest only about a third of the time. The period of incubation is from seven to eight weeks.

The flight of the condor is grand and beautiful, being the soaring flight of all vultures, propelling themselves more by motions of the head and neck than by their long powerful wings.

It soars to a greater height than any other bird, almost six perpendicular miles above the level of the sea, or nearly six times the ordinary height of the clouds.—Selected.

To Preserve Eggs.

To preserve the shells of eggs, first take care to clear them of their contents; get a small, fine-pointed common syringe, and inject the specimen with water until it comes out quite clean. When an egg has been partly hatched or addled, the removal of the contents generally includes that of the internal membrane or pellicle; this makes the shell weaker. When the specimens are quite clean internally, and have become dry (which will be in a day or two) take the syringe and inject them with a strong solution of isinglass (with a little sugar-candy added to prevent its cracking); blow this out again whilst warm. Then dry the egg thoroughly. This method varnishes the inside, and the first specimen on which it has been tried was a field sparrow's egg, which is to this day as bright in color and marking as a fresh specimen, and we have used this method continuously since.—*Ex.*

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Now being compiled by R. E. Doran & Co., Seattle, W. T., will probably be one of the best works of the kind yet issued, containing the names of all the principal collectors and dealers in the country. As the price for insertion of name and address is only 10 cents no naturalist should fail to send his name. Address

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THE ORNITHOLOGIST.

VOL. 1.

TWIN BLUFFS, WIS., SEPT., 1885.

No. 4.

Wisconsin Birds.

I.

1. THE WOOD THRUSH.

But most delightful of all, as the sun leaps above the horizon, is the mingled chorus of the birds.

The Wood Thrush (*Turdus Mustelinus*) arrived sometime during the night and is giving us his first song. To me it is an event of the season. Nothing in all our bird melody equals it! Such is its sweetness and copious variety that I shall not attempt to describe it in syllables. It must suffice to say that the tones are flute-like, if indeed they can be compared to any instrument; a variety of brief tinkles, trills, triplets and warbles, on many chords, intermediates and chromatics, following each other in close but rather slow succession, in every possible key, cadence and inflection, with a peculiar shake on a low key every now and then thrown in; the whole suggesting the idea of a solemn but happy and tender train of meditation; the bird sings as if in a delightful reverie. From the time of his arrival till late in June, or even in July, his peculiar melody may be heard at almost any time of day, but especially early in the morning and late in the evening. Never shall I forget how, once at the dawn of day, as I lay in my hammock high up under the thick shade of two great forest trees, the notes of the Wood Thrush were the first to break the stillness of the receding night. Faintly, but oh! how sweetly, they broke upon the air in the tree-top just above me. Louder and louder, were the liquid strains, until the silent isles of the thick forest echoed

to their delightful cadeuces, and all the songsters in the vicinity woke up and gave forth their united response.

Nothing is more characteristic of our beautiful forest, at the close of day, than the melody of this great woodland artist—this Beethoven among birds.

Not peculiar to the streams and wet places merely, as implied by both Wilson and Audubon, but exceedingly common as a summer resident throughout the woods, the Wood Thrush builds his nest in this locality late in May or early in June, in the crotch of a sapling, or on the horizontal limb of a large tree, any where from 7 to 15 feet from the ground. The structure strongly resembling that of the Robin, consists outwardly of dried leaves, coarse weed-stalks, grasses, rootlets, etc., plastered together with mud, and lined with rootlets for the most part, the lining often being quite scanty. The eggs, 3 or 4, some 1.00x.75 inches, in form and color are like those of the Robin.

When the nest of this species is disturbed or even approached, it has an animated twitter, almost as characteristic as its song, also a soft chuck. I do not find this bird particularly shy, as compared to other birds of the woods.

Like other thrushes, it is often on the ground, not infrequently utters its song from a log or stump, and seldom alights above the lower story of the woods. Berries and insects constitute its fare. Its flight is regular, and not very rapid.

About 8 inches long, the upper parts are bright brown, reddish on the head dusky on the rump and

tail, eye lids white, ear-patches dark brown and white striped, underparts white, breast creamy, the dark brown arrow-shaped spots being quite large and running in chains. The males and females are alike, after the manner of Thrushes.

Migrating to New England early in May, very rare in southwestern Maine, it extends further north into Canada West. I found it common about Manitoulin Island, and heard its song in the Lacloche Mountains. Early in Autumn it leaves us for its winter home in Central America. Audubon reported a few on the gulf coast in winter, but Mr. Maynard did not find it in Florida.

From *Rev. J. H. Langille's Our Birds in their Haunts*.

The above taken from *Rev. J. H. Langille's Our Birds in their Haunts*, is hardly a fair sample of the hundreds of similar articles to be found in this excellent work. It has been the authors aim to write a book on the birds of Eastern North America for everybody and we think he has more than succeeded. "There seems to be an originality of treatment and keenness of observation manifest in every chapter that captivates the lover of nature, and lets him into the secrets of bird life to an extent heretofore unparalleled in the works on ornithology." No person can afford to be without this valuable book, and in order to place it within the reach of everybody we make the following offer:

For three dollars we will send "Our Birds in their Haunts," THE ORNITHOLOGIST one year and a lot of rare Oological specimens which will retail readily for at least one dollar. Send at once.

An emerald, weighing a pound, the largest known, was found recently in a mine in Columbia.

FOR THE ORNITHOLOGIST.

Canadian Wild Birds.

BY W. L. KELLS.

I.

THE TITMICE.

There are two or more species of this genera found in the Dominion of Canada, but only one of these—the Black-cap Titmouse or Chick-a-dee—is commonly met with in Ontario. Another species—The Hudson's Bay Titmouse—is occasionally met with in those districts that border the Gulf of St. Lawrence.

THE BLACK-CAP-CHICK-A-DEE (*Parus atric apillus*)

This very interesting bird, called also the tom-tit, and from its notes, the chick-a-dee, is a perennial resident of Canada. It frequents all parts of the woods, but chiefly the deep wilds of the forest, and occasionally the orchards and gardens surrounding human habitations, where it soon makes its presence known by its plaintive but pleasing notes. Often has its pleasant lay cheered the heart of the lonely and bewildered traveller when astray in the trackless wilderness, without a sound or blaze upon the trees, to guide his wandering steps; weary and dejected has he sat down on the moss-covered log to contemplate upon his apparently hopeless situation, when the melody of this denizen of the wild wood falls on his ear and tells him he is not alone; cheered by the glad some lay he resumes his journey and reaches in safety the shanty of the pioneer, where the presence of the stranger is ever welcome. During the summer months the chick-a-dee is not often seen in the cultivated districts, except in *partially* cleared places; but as the autumn advances, when the chilly winds, nightly frosts, and falling leaves, indicate the approach of winter; when most of our summer songsters have fled to more

southern latitudes, and all nature begins to assume a dreary and desolate aspect; it then assembles in small companies, probably consisting of two old birds and their last brood, roves along the outskirts of the woods and becomes the daily companion of the wood-chopper during the winter season—even when the weather is cold and stormy—flitting among the branches of the fallen trees, and picking among the moss, lichens and broken buds, upon choice bits of which it appears largely to subsist in the winter months; and while thus occupied it warbles its chickadee as merrily as though surrounded by all the glories of the summer season. In intensely cold weather, and during storms it retires into dense thickets, and holes in trees, where it remains until the moderation of the temperature permits it to come forth again. Chick-a-dee is the common note and not the song of this bird. Its song consists of two notes which resemble the words “chee too” repeated in a soft, clear and melodious tone. This melody is more often heard in the winter and in the early part of spring, then in the summer season. Even in the coldest weather when the ground is covered with deep and frozen snow; if the air is calm, though the atmosphere may be cold, and the surface of the snow element is glistening like brilliant gems in the solar rays; perched among the leafless branches it sends forth its cheery notes among the forest trees. As the spring advances they separate in pairs for the purpose of breeding, and seek the most retired places in which to nest. They sometimes build in the natural hollows of trees or stumps, generally not far from the ground, but most frequently they make a cavity in some decayed stump, digging out the wood with their bills, like the woodpeckers, in which toilsome

task both birds assist. When the cavity is suitable for her purpose, the female forms in the bottom a warm nest, consisting of moss, fine woody fibers, and hair, in this are deposited six or seven eggs of a white hue, dotted with reddish spots. If the weather is cold, and she has occasion to leave the nest or while the eggs are being deposited, she carefully covers them over in her absence with the fine matter from the sides of the nest; at these times the nest more resembles that of a mouse than a bird. This species is scarcely four inches long, the head and throat are black, the rest of the plumage is bluish ash color and white.

(CONTINUED.)

Listowel, Ontario.

If the Birds Should Die.

The birds destroy countless millions of insects and this well-known fact, of which everybody is so tired, contributes more toward the production of supplies than all the work done by farmers. It is known that the birds all over the world eat more insects in one day than all the inhabitants could count in a year, and if they were all to die the world would come to an end, for so fast do insects multiply that one season would pass and the next would not find a leaf, bud, blade of grass, or other living thing on the face of the globe. The change would be, as though the sun had ceased shining and perpetual winter enwrapped the earth. This is what is meant by the remark that birds eat a great number of bugs.

All Herons lay light blue eggs. The Night Heron has three long white feathers hanging from the back of the head.

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Edited by **C. L. McCOLLUM,**
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of the country. Write for terms.

NOTES.

Hereafter the ORNITHOLOGIST will be issued in this form on the 1st of each month, and will contain valuable and interesting information on the science of which it treats. Many of these are written especially for us by well known Ornithologists, and it will also give articles sent us by our correspondents from all parts of the country. In short, we shall endeavor to make it an interesting journal of that most delightful branch of Natural History, Ornithology.

Advertisers! Give us a trial ad. We have a large circulation, constantly increasing, and an ad. in this paper will certainly pay you.

NOTICE C. H. Marsh's ad on Page 4 of cover.

Wild canary is the name frequently applied to the American Goldfinch which breeds so commonly in many localities during the months of July and August. Its nest is placed in trees or bushes, and is composed of some soft, downy material, usually thistle-down. It lays from four to six bluish white eggs .65 by .52 inches in size.

Collectors! You should not fail to procure a catalogue of Minerals, Precious stones &c. from W. S. Beekman, West Medford, Mass, before making purchases elsewhere. See ad on page 2 of cover.

Having a large number of mineral collectors among our subscribers we have decided for their benefit to add a *Mineralogical Department* to THE ORNITHOLOGIST and will hereafter devote ample space to that subject. W. S. BEEKMAN, West Medford, Mass. has kindly agreed to take charge of this section of our paper, and all communications on that subject must be addressed to him.

Mr. Beekman is an old collector and possesses one of the finest collections in the state of Mass. being so well versed in mineral lore we do not doubt that under his management "Mineralogy and Geology" will become the most interesting portion of THE ORNITHOLOGIST.

In the last issue of THE ORNITHOLOGIST, our printer made L. W. STILWELL's ad read "*Draw-Mica*" and "*in Granite*" instead of "*Uran-Mica*" a bright greenish canary incrustation in brown Uranite." The specimen we have received of this (Uranite incrustated in Uran-Mica is certainly one of the finest in our collection, and we take pleasure in recommending it to other collectors desiring rare and showy cabinet specimens.

A writer from Fiji asserts that when flocks of Tern and other sea-fowl rest upon the sea the water becomes smooth, an effect which he ascribes to oil emitted by the birds.

We learn through our exchanges that *The American Osprey* and *Our Birds*, have suspended. Failure to secure second class rates is the reason generally assigned.

The tallest bird known to ethnologists was found by Professor Herbert in the lower cocene deposits near Paris, France. It was over twelve feet in height, and could have bitten a man's head off as easily as a Woodpecker can nip a cherry. We cannot be too thankful that this bird has gone out of fashion and existence. Ladies would have wanted to wear it on their hats, and men who sat behind such bonnets or ornaments in the theatres would be unable to see whether a ballet or a prayer meeting were in progress on the stage.

We have received many letters of inquiry, asking us if we would take minerals and eggs in pay for a years subscription to THE ORNITHOLOGIST. We would say to those desiring a years subscription and not wishing to pay cash, that if they will send us six correctly labeled minerals, not less than 2x2 inches, or 75 cents worth of first class eggs, will be given a full years subscription and all the privileges of a cash subscriber. We desire minerals such as W. S. Beekman and L. W. Stilwell deal in. See advertisements.

F. H., Grass Lake, Mich. The bird you call High-holder, is the Yellow-shafted Flicker.

All specimens received from L. W. Stilwell are of the best quality. The student's collection consisting of 25 minerals which he sells for \$1.00 is very fine.

FOR THE ORNITHOLOGIST.

The Cactus Wren.

This bird is more or less abundant throughout the southern portion of California. And as its name implies is generally, if not always found in the immediate vicinity of patches of the cactus or prickly pear, indeed so accustomed have I become to this fact that when I run across a stray cactus wren in my rambles, I at once decide that a bed of cactus is not far distant; and when I arrive at a cactus bed I at once begin looking out for the wren. Not always with success however, as these wary little fellows, are so shy, that they will frequently jump down among the growth of cactus and unobserved hop off to a safe distance from the intruders. So expert are they at this game that I have often found their nests containing four or five eggs still warm; showing that the bird had just left her nest, but never-the-less without obtaining the slightest view of her. The Cactus Wren commences building about the first of May and eggs can be procured by the fifteenth of that month.

The nest is composed of a fine yellowish grass, moss, etc, and generally contains a small piece of snake skin. It is a neat structure and, with few exceptions, is placed amongst the leaves of the prickly cactus, which renders its acquisition a rather troublesome, not to say dangerous undertaking. It is however worth the trouble taken to secure it, for the nest alone is a beautiful article of bird mechanism; generally roofed over with a neat little hole in the side for an entrance. The eggs are also very handsome, the complement generally consisting of five beautiful reddish pink eggs, about the size of a catbird's. My only regret in regard to these eggs, is that they do not retain the brilliant, clear color exhibited when first taken from the nest and blown.

The St. Lucas Wren is a very near cousin of the preceeding; the eggs however are quite different, having a lighter background and are more distinctly marked with fine blotches which never run together, forming a solid color, as is often the case with those of the cactus wren. On account of the extreme timidity and scarcity of this bird, in this locality, I am unable to say much in regard to its food and general habits.

A. M. Shields, Los Angeles, Cal.

The Titmice of New Mexico.

PLAIN TITMOUSE. *Lophophanes inornatus*. Plain leaden gray with a faint olive shade, paler below, without markings of any kind. Length $5\frac{1}{2} \times 6$. Wing and tail $2\frac{3}{4}$. Quite common about Santa Fe in the winter.

GRAY TITMOUSE. *Lophophanes inornatus griseus*. General plumage leaden gray, with faint olive shade on the back; below lighter, even soiled whitish on the belly; extreme forehead and space about the eyes and ears mixed with white; wing and tail unmarked; conspicuously crested; same size as the first. Quite common about Silver City during the winter, occasionally in small flocks, but usually singly or in pairs among the cedars and junipers. In the spring they retire to the higher mountain ridges, where they probably breed though I have not as yet found their nest.

Wollweber's Titmouse, *Lophophanes wollweberi*. Above ashy, with olivaceous shade; below soiled whitish; chin and throat black; side of head, neck, forehead and over the eye and around top of the head white; stripes through the eye, across the forehead, on sides of the head and neck black; crest in front the color of the back, the long feathers at the back black; wing and tail slightly edged with whitish. Length $5-5\frac{1}{4}$;

wing and tail $2\frac{1}{4}$. Found in the cedars and junipers about Silver City during the fall and winter, singly or in small flocks; breeding in the mountains in the spring. May 11. I found a nest in an old woodpecker's hole in an oak tree, some twenty-feet from the ground, containing young birds.

Long-tailed Chick-a-dee, *Parus atricapillus septentrionalis*. Above grayish ash with slight olive tinge; below whitish with slight brownish shade on the sides; wings and tail strongly edged with white; chin, throat, crown and nape black; sides of head white. Length about $5\frac{1}{2}$, wing and tail 3. Abundant in the mountains in the northern part of the Territory.

Mountain Chick-a-dee, *Parus montanus*. Almost exactly like the preceeding, but with a broad white line over the eyes and across the forehead. Of rare occurrence in the mountains about Silver City, in the Spring; more abundant, but by no means common, near Santa Fe and Las Vegas Hot Springs.

Lead-colored Tit. *Psaltirparus plumbeus*. Above and on the crown leaden gray, below soiled whitish, ear-patch brownish; wing and tail slightly edged with whitish; bill and feet black; iris in some birds yellow, in others brown. Diminutive birds, $3\frac{3}{4}$ to $4\frac{1}{4}$ long; wings 2 or less, tail 2 or more. Very abundant throughout the winter in the neighborhood of Silver City. Of a restless, active disposition they are found in flocks of twenty to fifty among the cedars and low shrubs upon the hillsides, hanging in every conceivable position from the twigs and branches and keeping up a constant twittering as they search for their food. Here one moment and the next dart-away to some distant tree, always on the move and pygmies in size they afford no easy mark for the collector.

The nests, built in April, are curious bottle-shaped structures, composed of leaves, fine grass, weeds and feathers, closely interwoven and suspended to a branch of the cedar or juniper, from eight to twenty feet from the ground. They measure about 8 inches in length 12 in circumference at the largest and 5 at the smallest part. The entrance is on one side near the top, curiously concealed by an over-hanging flap. The eggs are pure white, measuring .55x.35. Black-eared Tit. *Psaltiriparus melanotis*. Exactly like preceding in form and size but with a glossy black stripe through and around the eye and ear, nearly meeting its fellow on the neck. Of very rare occurrence, I have shot a few from flocks of the lead-colored Tit with which they seem to associate. The nests are like those of the Lead-colored Tit and they probably nest in the same locality as I shot two old and five young birds near Silver City in the summer of 1884.

Yellow-headed Titmouse. *Auriparus flaviceps* Above ashy; paler below; head yellow; bend of the wing chesnut, length $4\frac{1}{2}$ wing and tail $2\frac{1}{4}$. Very rare; have taken a few specimens on the lower Rio Grande.

Charles H. Marsh,
Silver City, New Mexico.

OUR TABLE.

The Hoosier Mineralogist and Archæologist, published by Harry F. Thompson, 17 Butler St., Indianapolis, Ind; is one of our best exchanges.

The August number of *The Monthly Et Caetera* contains 16 or pages. It is published by The Et Caetera Publishing Co., Woodstock, Ill.

Greetings from Nature is a monthly journal published to aid young naturalists, by A. H. Hammond, Wareham Mass.

The Museum is the title of a 16 page magazine, from 1220 Sansom Street, Philadelphia. It is finely printed and illustrated and is full of excellent articles for collectors of all classes, and the young naturalists.

The last two numbers of *Tidings from Nature* are a vast improvement over former issues. It is published for the advancement of science by H. M. Downs, Rutland, Vt.

We are pleased to number *The A. A. Journal* among our exchanges. It is a large 24 page paper published in the interests of Amateur Naturalists, Students and Collectors by W. E. Skinner, Lynn, Mass. fearlessly exposes all frauds and for this reason is invaluable to collectors.

Have also received from Frank H. Lattin, Albion, N. Y., his 32 page "*Catalogue and Price List of Minerals, Shells, Bird's Eggs, &c.*" No collector will regret an investment of five cents for this catalogue.

The Western Oologist, Milwaukee, Wis., after a silence of seven years, is now being ably edited by Frank M. Sherin. X.

Rambles in Nature published by R. J. Wood, Jackson, Mich., is a good exchange.

The Coin Review an authentic journal on Coins. Published at Pineville, Ky. X.

Editors are respectfully invited to exchange. We would ask publishers, authors, and societies to send in their publications especially those relating to *Natural History*.

Mineralogy and Geology.

URANITE.

BY L. W. STILWELL, Deadwood, D. T.

This wonderful Black Hills country,—this isolated group of mountains surrounded by plains, like an island in a sea,—seems to have been designed to represent, in greater or less quantities most of the metallic minerals of the world. Some startling discovery is being made ever few months, and one by one the list of precious metals is extended, until its length and variety astonish the "old-timer" himself, and the "tenderfoot" finds, as he enumerates its products, the Black Hills to be "a good country to stay in."

The latest excitement is the discovery of what is dubbed "The Tin Mountain," said to be a mountain of tin; surface rock assaying very high. Here are gold, silver, copper, tin, lead, iron, platinum, also mica, salt, coal, oil, etc., but who would have thought of finding the ore of Uranium (the rare and costly mineral confined mostly to Bohemia) in this new country? So it is, the veritable pitch-blende exists here. A foreigner from the centre of Germany is the discoverer; locality, Bald Mountain, nine miles south from Deadwood. Connecticut and North Carolina yield Uranium ores very sparingly. The specimens of Uraninite, Johannite and Autunite (ores of Uranium) from Bohemia, in my possession, are none of them showy specimens. When it comes to selection of specimens by the collector, the plain pitch-blende is not the sort taken, but the *Uranite*, so beautifully flecked with bright greenish, canary-yellow spots, is what attracts. This incrustation is termed *Uran-Mica*, which resembles small fish-scales, or a waxy

coating. The green-yellow upon a brown surface makes a fine contrast. A large mineral dealer in Germany is sending here for these Uran-Mica specimens, and giving a large price for them. A several hundred pound shipment was made recently from Deadwood to Germany. The demand from that source is indicative of a superior specimen here, or a scarcity there. The oxides of Uranium are used in painting upon porcelain, yielding a fine orange in the enameling-fire. When extracted from the ores, variously named and concentrated to a fine artistic material, Uranium is then said to be worth upwards of one hundred dollars a pound.

Scale of Hardness.

To aid in determining the different minerals a scale of hardness has been adopted, as follows:

- | | |
|---------------|--------------|
| 1, Talc. | 6, Feldspar. |
| 2, Rock Salt. | 7, Quartz. |
| 3, Calc Spar. | 8, Topaz. |
| 4, Fluo Spar. | 9, Sapphire. |
| 5, Apatite. | 10, Diamond. |

If a mineral is found no harder than talc, its hardness is 1. If it can be scratched by quartz, but can itself scratch feldspar, the hardness is between 6 and 7.

High Priced Eggs.

The New York *Sun* contains the following: Two eggs of the great auk, supposed to be extinct, recently sold in an auction room in Edenburg for \$16.00. They were afterwards sold in London, one fetching \$500.00 and the other 102 guineas. This is believed to be the highest price ever paid for an egg, except a single specimen of a moa egg, which was sold in London in 1865 for \$1,000, or £200.

A nest of these would be worth finding, provided one could find purchasers at the above price.

THE ORNITHOLOGIST.

The Flamingo.

The Flamingo is a species of birds which until recently was placed by naturalists among the *grallatores*, (waders), but is now generally ranked among the *palmipedes*, (swimmers). The bill is large, deeper than broad and suddenly curves downwards near the centre, so that when the bird seeks its food, either in the water or mud, it makes use of the bill in a reversed position, the upper mandible being below. The upper surface of the tongue is furnished on both sides and at the base with numerous small, flexible horny spines, directed backwards. They seldom make use of their webbed feet for swimming, to which the length of their legs is not well adapted, the use of the membrane being rather to support them on soft muddy bottoms.

The Flamingo, as its name implies, is of a deep red color, which is very handsome. The bill towards the end is black, the remainder being yellow. The quill feathers are also black, but all other parts of the bird are scarlet-red.

The body of the Flamingo is not larger than that of a goose, but is elevated on a pair of red legs nearly three feet into the air, while the neck is long enough to reach the ground very easily. They feed on small fish and water insects, and when feeding keep their feet almost constantly in motion, in order to start their prey.

The nest of this bird is singularly constructed, being formed of mud in the shape of a little hill, with a cavity at the top. This hill is so high that when the bird is sitting on

the nest her legs fall down over the side, instead of being placed under her, like other birds. In this manner she sits with her legs at full length on one side of the nest.

The Flamingo inhabits the shallow waters or salt marshes of tropical countries, chiefly those of Asia and Africa, or on the banks of rivers or inland lakes, and by their large size and rich colors make a brilliant spectacle. The American Flamingo is more of an orange tint and is abundant on many parts of the eastern and western coasts of America.

OUR PREMIUM LIST.

To every person sending us 35 cents for one years subscription to THE ORNITHOLOGIST we will send any one, or any group of the first class side blown eggs.

1.	One egg of Cala. Thrasher	\$.40
2.	" " " " Brown Towhee	.25
3.	" " " " Cactus Wren	.50
4.	" " " " West Wood Pewee	.40
5.	" " " " Killdeer Plover	.25
6.	" " " " each of 11 and 149 a	.35
7.	" " " " 63a " 170a	.28
8.	" " " " 231c " 274	.32
9.	" " " " 264 " 278	.28
10.	" " " " 482 " 460	.30

To the person sending us the largest list of subscribers before December, 1st, 1885, we will present a collection of rare eggs, in sets with data. \$10.00

2nd, and 3rd, same as first,	10.00
4th, Our Birds in their Haunts,	3.00
5th, Cyclopædia of Expression,	1.00
6th, Mantons Taxidermy,	.50
7th, The Oologist Handbook,	.25
8th, 9th, Davis & Baker's Oologists Directory,	60
10th, Minerals,	.25

Texas Bird's Eggs, Skins, &c.

In order to close out a large stock I will for the next 60 days sell at the following low prices. Eggs single or in sets with full data.

First class eggs of Mocking bird, 7cts.; Lark Finch, 12 cts.; Blue Jay, 6cts.; Scissor-tailed Flycatcher, 15c.; Mourning Dove, 7cts.; Cardinal Grosbeak, 10 cts.; Painted Bunting, 15 cts.; Texan Orchard Oriole, 10 cts.; Yellow-billed Cuckoo, 15 cts.; Texan Quail, 15 cts.; Second class eggs half the above rates.

Skins of Mocking bird, 20 cts.; Tufted Titmouse, 20 cts.; Carolina Chickadee, 25 cts.; Carolina Wren, 25 cts.; Cardinal Grosbeak, 20 cts.; Dwarf Cowbird, 50 cts.; Meadow Lark, 20 cts.; Blue Jay, 20 cts.; Pileated Woodpecker, 40 cts.; Red-bellied Woodpecker, 20 cts.; Mourning Dove, 25 cts.; Bells Vireo 25 cts.; Summer Redbird, 30 cts.; Yellow-winged Sparrow, 20 cts.; Lark Finch, 20 cts.; Painted Bunting 30 cts.; Black-throated Bunting 20 cts.; Texan Orchard Oriole, 30 cts.; Scissor-tailed Flycatcher, 40 cts.; Great Crested Flycatcher, 20 cts.; Yellow-billed Cuckoo, 25 cts.; Texan Quail, 25 cts.;

Minerals, very fine at 3cts., per oz. Transparent Selenite, Fossil Wood, Silicified Wood, Flint (various colors), Fossiliferous Sandstone, Fossiliferous Sandstone, Fossiliferous Cretaceous Rock, Fossiliferous Iron Ore, Fossiliferous Flint,

Arrow heads, 5, 10 and 15 cts.; Scorpions, 2 for 10 cts.; Spanish Moss 5 cts.; Cotton Balls, 3 for 10 cts.; Texas Unionida 5 cts. each; Helicitea, Planorbis and Physa, 3 for 5 cts.. All postpaid.

Orders under 50 cts.; must contain 5 cts.; additional for postage. Make Postal Notes or orders payable at Giddings, Texas. Stamps or silver taken for small amounts.

Address, J. A. SINGLEY,
Fedor, Lee Co., Texas.

BARGAINS!

To the patrons of THE ORNITHOLOGIST we offer the following special price list.

All orders will be promptly filled and forwarded at my risk by return mail or express, Postage or express, charges prepaid.

1. Wood Thrush	\$.08
11. Mocking blrd	.05
12. Catbird	.02
13. Brown Thrasher	.02
16. Cala	.40
57. St. Lucas Cactus Wren	.50
63a. Western House Wren.	.15
149a. White rumped Shrike	.20
170a. Crimson House Finch	.10
182. Green-backed Goldfinch	.20
183. Lawrence's	.30
204a. West. Lark Finch	.25
231c. Calla. Song Sparrow	.15
240b. " Brown Towhee	.20
262. R. & W. Sh'd Bl'kbird	.15
269. Hooded Oriole	.60
272. Bullock's Oriole	.15
306 West. Kingbird	.10
307. Cassin's	.35
317. Black Pewee	.15
337. Costa's Humming bird	1.25
363. Texan Sapsucker	1.00
378b. Red-shafted Flicker	.15
385. Road Runner	.35
394. Amer. Barn Owl	.50

TWO SPECIAL OFFERS TO ENLARGE THE CIRCULATION OF THE ORNITHOLOGIST.

No 1:

We will give 25 cents worth of the above eggs for every new subscriber you will send us for THE ORNITHOLOGIST before Nov. 15, 1885.

These subscriptions will count towards the valuable prizes to be given Nov. 15th.

No. 2:

For \$1.00 we will send one dollar's worth of the above eggs and THE ORNITHOLOGIST one year.

Address all orders, plainly, to

THE ORNITHOLOGIST,
Twin Bluffs, Richland Co., Wis.

THE ORNITHOLOGIST.

VOL. 1.

TWIN BLUFFS, WIS., OCT., 1885.

No. 5.

Wisconsin Birds.

II.

(See 2. "*Wilson's Thrush*," No. 1 of the *Ornithologist*).

III.

3. THE GRAY-CHEEKED THRUSH.

The Gray-cheeked or Alice's Thrush, as it is usually called, does not nest in the state, but is quite common during the migrations which occur early in May and in September; being most abundant in the fall from September 1st until the end of the month. During their stay, their clear and musical song is frequently heard pouring forth in transcendent ecstasy from our small groves and woods bordered by fields. Occasionally they are seen flitting along old tangled fence rows in quest of insects, which constitute their principal fare. Rarely one enters an orchard for a taste of grapes.

The song of Alice's Thrush is similar to that of the Wood Thrush, but is not nearly so loud, liquid and penetrating.

TURDUS SWAINSONI ALICIE is about 7.50 x 8.; rather slender, deep olive brown above, becoming reddish on the rump and tail; breast creamy and streaked with large arrow shaped black spots. The creamy breast shades into the white of the underparts, and the black spots become more obscure on the lower parts of the breast.

They build a neat nest, (but somewhat bulky) composed outwardly of dried weeds and grasses, and lined with fine rootlets.

The eggs are usually four in number, and in color are of a bluish green, thinly spotted with dots of

various shades of brown. Average dimensions about .95 by .68 in.

IV.

4a. OLIVE-BACKED THRUSH.

TURDUS SWAINSONI.

Closely resembles Alice's Thrush; but may easily be distinguished from the latter by a creamy tint about the head, and yellowish rings around the eyes. Nest and eggs similar. Average dimensions .91 by .65 in.

C. L. M.

FOR THE ORNITHOLOGIST.

The Purple Finch.

(CARPODacus PURPURENS.)

This bird was formerly abundant in South Eastern Massachusetts but owing to the incursions of the Exotic Sparrow their numbers have been decidedly diminished. Its song most are acquainted with, and success has been awarded those who endeavor to keep them in confinement. And as far as song is concerned I am far more pleased with it than with that of the Canary whose high shrill voice is in great contrast with the Linnets sweet liquid notes, which seem fairly to bubble from his throat.

Perched on the highest branch of some tall elm he spreads his wings and with a beautiful warble he sails down to some fence post or tree, continuing his song during the descent.

How often have I admired his movements as with quivering wings he waltzes back and forth before his chosen mate, singing sweet notes to charm her, and soothing her with his most delightful strains. Woe to any other suitor who appears on the scene at this moment.

The Purple Finch, or as he is more commonly called the Linnet, appears in Massachusetts in early March. At that time he seems to be in the best of humor and his happy blithesome song seems to be sweeter than ever.

He soon chooses a mate and they generally begin nest building about the 20th of May. Five eggs are then laid which are the exact counterpart of those of the Hair bird, only larger. The nest also resembles that bird's being composed of small twigs and horse hair.

C. H. A.

FOR THE ORNITHOLOGIST.

Canadian Wild Birds.

By Wm. L. KELLs.

II.

THE WHITE-BELLIED NUTHATCH. (*Sitta Carolinensis*).

In color and size, and in some of its habits this forest ranger resembles the Titmouse. It has a straight and pointed bill which it occasionally employs like the woodpeckers to perforate the bark of trees, and particularly to scale it off, in order to secure the insects that may be concealed beneath. It climbs the trees in all directions with much agility; the tail is short and turned upwards, and is therefore of no assistance to it in clinging to the sides of trees, like those of the woodpeckers or tree creepers. It has but one toe on each foot directed backward and three forward, it is therefore a true perching bird, though its habits much resemble those of the climbers. It is sometimes amusing to watch this bird perform its various evolutions upon the tree, while in search of food, or materials of which to form its nest, running up and down the trunk or among the branches, it seems to make little difference to them whether head or tails are

uppermost, and at times, when resting their feet cling to a piece of bark or a branch with head downward. Besides insects and their produce this species feeds on various kinds of seeds, nuts and fruit, and upon the approach of cold weather it has been observed to make holes in decayed trees, and therein deposit a quantity of seed, doubtless as a provision in case of necessity during the winter time for this species remains in the woods of Canada throughout the year and in the coldest periods takes refuge in the cavities that it has made, or other holes in trees. In the winter when the weather is not very cold it is frequently observed abroad searching for food among the trees; at such times it will sometimes visit barns in the vicinity of its haunts; but soon as the demands of hunger are satisfied it again seeks the shelter of its native woods. This bird is also remarkable for the instinct it possesses of fixing a nut in a crack while it pierces it with the bill, swinging the whole body at the same time, as upon a pivot, in order to give effect to each stroke.

Early in the month of April, several years ago, while I was engaged sugar making, on the old homestead farm in Peel, I observed two pair of these birds busily engaged in collecting materials for the building of their nests in the vicinity of the camp-fire. Both male and female assisted in preparing a cradle for their future progeny, and a variety of materials were collected for the purpose; pieces of rough bark were first used, then moss, fibers of bark and a large quantity of hair completed the nest. After laboring for an hour or two they would cease the work of nest making and devote a like period to procuring food, and when the demands of hunger were satisfied they would again commence nesting. In about a week the nest

was finished; and two weeks later, after the female had deposited her full set of eggs, wishful to see the manner in which the nest was formed, and the number and color of the eggs, I cut down one of the trees. The cavity in which the nest was placed was a natural hollow, but to gain admission the entrance had previously been enlarged by some small animal, probably the flying squirrel. The nest was large, not very neatly formed, and contained seven eggs; these were of a white color thickly dotted with brown like spots. The other nest, in a large knot-hole, about sixteen feet from the ground, was not disturbed. During the breeding season I had frequent opportunity to watch the habits and actions of these birds and see their connubial and parental affection: incubation appeared to be wholly performed by the female, but while she attended to this duty, her wants were constantly supplied by the male. When the young were hatched they were fed by both parents, one or the other returning every few minutes with food in their bill, and at the same time carefully removing the mute of the young from the nest. Small and weak as these birds are they nevertheless possess arts of defence, and their affectionate regard for their brood when exposed to danger cannot be surpassed by any of the feathered race. One day a red squirrel frightened by my approach ran up the tree in which the nest of the Nut-hatches was placed, and which now contained their half fledged young. Immediately one of the parent birds, which I supposed to be the female, seeing the danger to which her helpless young were exposed, uttered a despairing cry, to protect them with all the means at her command. Placing herself before the entrance to the nest she spread her wings and tail across it,

and when the squirrel approached, she opened her bill and moved her body from side to side in mute but evident determination to save her young or perish with them. But the squirrel instead of going to the nest, or advancing up the tree, appeared so affrighted at the sight that he precipitately retreated and ran away as fast as possible. The bird paused a few moments, and then flew off among the trees, making the woods ring with her notes of exultation. When its nesting place is undisturbed, it will occupy the same premises for several successive years, but it does not appear to occupy any other than a natural cavity, and for this reason it sometimes nests near the ground, and again high up in a tree.

Its length is about five inches, and its plumage is ashy blue above and white beneath, the head and neck being black.

(TO BE CONTINUED.)

Listowell, Ontario, Canada.

Good-by, Little Bird.

Good-by, little bird, the storm-clouds

Are gathering gray and drear;

At the chilly touch of the frost-king

The sunbeams have paled with fear,

Wither'd, the leaves, and fallen lie;

Sadly the winds of autumn sigh;

Good-by, little bird, good-by, good-by;

Little bird, stay not here.

Good-by, little bird, I see thee

Winging thy southward way

To a sunny land thou knowest,

Caroling as thou goest,

Singing a blithesome lay.

Alas, and alas, no longer

Shall thy tuneful voice be heard,

Till the leafless limbs be clothed again,

And the blossoms-gladden hill and glen.

Good-by, good-by, little bird, till then;

Good-by, good-by, little bird.

—ELLEN TRACY ALDEN.

THE ORNITHOLOGIST.

A Monthly paper of Natural History.

Especially devoted to the study of Birds, their nests and habits.

Edited by **C. L. McCOLLUM,**
TWIN BLUFFS, WIS.

Correspondence and items of interest relating to Natural History solicited from all.

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NOTES.

We have received many letters of inquiry, asking us if we would take minerals and eggs in payment for a years subscription to THE ORNITHOLOGIST. We would say to those desiring a years subscription and not wishing to pay cash, that if they will send us six correctly labeled minerals, not less than 2x2 inches, or \$1.00 worth of first class eggs, will be given a full years subscription and all the privileges of a cash subscriber. We desire minerals such as W. S. Beekman and L. W. Stilwell deal in. See advertisements.

Mr. E. M. Haight, Riverside, Cal., has sent us his annual catalogue. From personal experience we know Mr. Haight to be perfectly reliable. His ad. appears on first page of cover.

If you wish to gain the greatest amount of scientific knowledge from your collection collect only in sets.

The Garden of Eden, now called Gournah, is forty miles northeast of Busreh in Turkish Arabia, at the confluence of the Tigris and Euphrates. The country is destitute of vegetation with the exception of date palms, which are quite luxuriant.

Were we collecting, in order to form an elegant cabinet collection of only the best prepared specimens, C. H. Marsh of Silver City, N. M., would be largely patronized by us. The bird skins, obtained from him, are the neatest, most life-like specimens it has ever been our pleasure to receive. Mr. Marsh must use infinite care, to render them so true to nature.

In a back number of the *Young Ornithologist*, Elisha Slade, Somerset, Mass., gives an interesting account of a melanite robin, seen by him May 31st, 1881.

Captain R. B. Baxter, Sparta, Ga., recently succeeded in killing a robin, having white back, tail, wings and head, and a red breast.

Sergeant Green captured an albino robin in Leverington Cemetery, Phila., where it had been seen mingling with other birds for several days.

A late paper contains an account of the capture of an albino crow, by a western farmer, who sold it for five dollars.

Be sure and read A. E. Southworth & Co's advertisement in regard to Standard Directory.

The *Pine and Palmetto* of Oakland, Cal. has recently enlarged to 12 pages.

One of the most curious and interesting studies in nature is afforded by a thoughtful examination of birds' nests in all their wide variety, especially if we are permitted to witness their construction by the marvelous "artists of the air." One of the wonders of our childhood was the "hangbirds" nest, swaying so gracefully suspended from the branch of a lofty elm; and another childhood wonder, which still clings to us, is why the nighthawk should choose to substitute for a nest a simple flat rock in an open field fully exposed to attack and to the scorching rays of the midday sun, while some birds use every possible endeavor to secrete and guard from attack their nests. The pine-pine builds a singular nest. It is a double nest in two compartments; the mother sits in the alcove; in the vestibule watches the father, an attentive sentinel to repulse invasion.—*The A. A. Journal.*

Bushels of Dead Birds.

THOUSANDS OF SPARROWS KILLED DURING THE RECENT STORM.

The dead animal collector for the Health department gathered a bushel basketful of dead sparrows yesterday morning at the corner of Second and Lloyd Streets. They were driven from their roosts in trees and in cornices of buildings by the heavy fall of rain during the night. The water fell in such a volume as to drown them before they could get under shelter again. The theory that they were killed by falling hail is erroneous, because no hail fell. The keeper of the Courthouse park picked up nearly 1,000 sparrows under the trees and surrounding the building. Streets in every section of the city were covered with dead birds yesterday.—*Milw. Sentinel Aug. 19th.*

It is stated that not less than 60,000 canary birds are sold in New York City every year, besides 3,000 parrots, 1,000 mockingbirds, 1,200 to 1,500 cardinals, 3,000 to 4,000 gold-finches, also linnets, skylarks, birds of Paradise, of which 500 a year are sold; grobtils, nonpariels, and a long list of common American birds, such as robins, yellow-birds, red-winged blackbirds, brown thrashers, cat birds, etc. The canaries alone sell for \$100,000 at least, while the trade in other birds brings the gross sales to \$250,000. This represents the business done by regular breeders and importers. It does not include what maybe called the family traffic.

How to Preserve Birds Entire.

The Western Oologist says:—

"There is much more to learn about a dead bird than the skin can teach. In fact there is probably more to be learned from the body without the skin, than the skin without the body. As it is as impossible to fully dissect a bird's body, and describe and illustrate the same, as it is to describe all your bird-skins when collected, why would it not be well to do all this during the winter when you have more time? In order to do this a preparation can be made to preserve all birds entire."

Though we cannot speak from personal experience we think after a careful perusal of the little pamphlet sent us by Mr. E. L. Brown, Durand, Wis., that his method for preserving and embalming is the most practical way in which small birds and mammals may be preserved entire, *without injuring* the plumage or fur. It is certainly the best method that has been brought to notice. For full particulars see Mr. Brown's advertisement.

The Standard Directory.

A. E. Southworth & Co. have favored us with a copy of their prospectus of the Standard Directory which is to issue on January 1st, 1886. This book consists of 100 pages of heavy tinted book paper, neatly bound in Japanese antique cover, and will contain the names of over 1000 "collectors of stamps, coins, antiquities, etc., also those interested in Ornithology and Oology and other branches."

Each department will be complete in itself. It will certainly be one of the most complete Directories ever published, and no active collector will fail to send Mr. Southworth 25 cts., which is the price of subscription, for name, address, special branch engaged in, and whether correspondence is desired during the spring of 1886. Circulars and subscription blanks free on application.

Davie's Egg Check List.

Prof. Oliver Davie informs us that he has been busily engaged revising for the second edition of Davie's Egg Check List, the whole of the first edition being exhausted except some twenty-five copies in the hands of each of the prominent dealers. The second edition "will be complete, giving accurate descriptions of the nests and eggs of all North American birds known to breed. It will also contain ten full page engravings as fine as human skill can make them, drawn by Dr. T. Jasper. It will, on the whole, be the most complete and authentic work on the subject published, and, of course the cheapest." Mr. Davie expects to have his book ready for distribution about the first of this month, after which he will issue an "Illustrated Catalogue" of Taxidermal and Oological supplies.

OUR TABLE.

The A. A. Journal, published by W. E. Skinner & Co., Lynn, Mass., is one of the best Natural History papers on our table.

The Orient, "Devoted to Collectors," is a neat exchange from Henry W. Warner, 250 Lexington Ave., New York City.

The Hoosier Naturalist, published at Valparaiso, Ind., is one of our latest exchanges. "It is an Illustrated Eight Page Three-column Monthly Quarto," devoted to natural history, and makes a very neat appearance. The Publishers have our best wishes.

The chapters on the several prominent naturalist's which are appearing each month in *The Museum*, are of the most interesting and instructive nature. The illustrations are excellent.

The Western Oologist from 2806 Wells St., Milwaukee, Wis., is one of our best exchanges. We find it to be one of the most interesting papers that we receive.

We have been favored with several copies of *The Western Plowman*, edited by J. W. Warr, of Moline, Ill. This is a very entertaining paper, devoted to the interests of home, farm and family, and well worth 50 cents per annum.

The West-American Scientist, edited by C. R. Orcutt, San Diego, Cal., is a 12 page monthly magazine, devoted almost exclusively to the Pacific Coast.

It is impossible to notice each of our 83 exchanges; editors will please accept thanks for same.

Editors are respectfully invited to exchange. We would ask publishers, authors and societies to send in their publications, especially those relating to *Natural History*.

Mineralogy and Geology.

On the Care of Minerals.

W. S. BEEKMAN.

Much has been suggested as to the proper care of mineral specimens, and it seems quite out of the place to say more on this subject, but it seems to me that if the attention of amateurs had been called through the means of such a valuable medium as *THE ORNITHOLOGIST* is at present, I could not have visited over twenty good collections, and found certain specimens, as I did, in such shabby form.

Therefore, asking those that already are familiar with the following suggestions to bear with me, I propose to give, under three headings, a series of valuable hints to the uninitiated, which I hope will be further extended by each individual worker, as this is, at best, only a hasty outline. When this paper has had the liberal support from every collector in this country, as it should have, perhaps the editor can afford to illustrate, then will be a good chance for suggestions as to the neatest style of a cabinet, with diagrams.

Collectors doing any sort of an exchange business, or perhaps *field-work* (they are to be envied, rather than those that have finer collections made by purchasing,) will perhaps become cramped for room in which

to store their fast accumulating duplicates; may find a neat, and inexpensive method of storing in the following manner, which by far excels any shelf arrangement possible.

Procure from your wholesale grocer a dozen, or so, large flat wooden boxes. I prefer the long, narrow soap-boxes. Have them securely nailed, with the cover on, and then cut in two, so that one box makes two trays. Plain off the top edges, and pile them one on another. Thus from the dozen boxes you have twenty-four nice, neat trays, that can be piled in one column, and will contain just a convenient number of specimens to exhibit at one time, and all but the top one is naturally protected from the dust, and that one may be covered, as one chooses. Next to the receptacle comes the form in which the specimens should be kept. For good work one should have a regular 12 inch handle, stone hammer, and a fine jewellers hammer for delicate specimens. A cold steel chisel, and a small one such as used in *repousse* work will be found useful. There is no necessity for one to have a pound of rock on a specimen, where it can be reduced to two ounces. Again, it is hardly wise to reduce a specimen that is finely crystallized, merely to decrease the size, thereby lowering its value. Judgement in all cases is required. There is less danger of crushing a rock if it is held firmly in the hand, than by pounding on a hard surface, and where practical is to be preferred. Minerals that cleave readily are best improved by pounding on the sides, rather than on the faces. Blocks of feld-spar, may by careful pounding be reduced to thin plates, taking the precaution to pound alternately on the four sides. Where, by a blow on the surface, as I have repeatedly seen done, the specimen is

divided into useless fragments. Plates of mica that have become badly soiled; more especially the black biotite, may be bettered by cleaving with a sharp knife. Where a specimen is very fragile, as some of the arragonites, etc. Where there is only a mass of fine crystals, it is wise to place on a false gangue made up of plaster-of-paris, which if neatly made will not look very much out of place, and is certainly better than having the specimen to break up. Probably it will be the fortune of the more advanced collector only, to have the pleasure of trimming some of the finer species, such as the green garnets, or *ourav-örite*, a quantity of small pieces will always be wasted, but if kept in small drachm vials can be advantageously used in exchanging for microscopical use, or blowpipe analysis. A crystal that has become broken should be neatly mended at the time of breaking, as the pieces might get lost, and a specimen is not materially spoilt after mending. Stratenä, Chase's liquid glue and Tennexine, are the three popular cements mostly used, the parts to be mended are to be warmed before attaching. I would say tennexine is open to a bad objection, in as much it leaves a white coating on the outside of the mineral where it dries through the excessive use, that is hardly impossible for even the most careful to obviate. A liquid glue that may be obtained from the writer on application is decidedly the finest thing in existence, it holds well, dries quickly, and leaves a transparent coating, containing no acid to corrode any of the carbonates, as some of the others do. Sufficient has been said concerning the trimming of specimens for the cabinet, and with the following suggestion, will close this subject, and next look at the methods of cleaning which follows after trim-

ming. It is best for the field-worker to trim his specimens on the spot, rather than carry trash away with him. I have seen a young collector on his first trip to a quarry, rush frantically about, picking up the fragments about the debris, exclaiming all the while, 'Oh! isn't this fine,' and 'I must have this,' etc. He gets his bag full, and perhaps is just leaving the place with his heavy load, when he discovers something better, but he has no room for it, and probably no time to pick out the poorer of what he already has, to make room for the new. Whereas, if by good picking he had obtained fresh clean specimens, gathered a number and sat down, and trimmed them nicely, one will get as a result, fifty per cent better specimens by the time he is through, than if he waits until he gets home to trim his specimens. Specimens, as soon as ready for carrying should be wrapped in paper, which should be carried on collecting trips for that purpose.

Small specimens, as crystals, fragments, small fossils, etc., are better displayed by glueing to the center of a good bristol board, and neatly writing the name underneath, with locality.

The best form of a label for the cabinet is the number being, the number it is indexed in Dana's System.

<p>W. S. BEEKMAN, -Collector of- MINERALS and FOSSILS. West Medford, - - Mass. Name, <i>Quartz Crystals.</i> Locality, <i>Hot Springs, Ark.</i> Compositon, <i>Silv.</i> No. <i>231.</i> Group <i>Oxyds.</i></p>
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This saves looking the page in the index, whenever one wishes to read of a specie.

THE ORNITHOLOGIST.

VOL. 1.

TWIN BLUFFS, WIS., NOV., 1885.

No. 6.

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Birds Eggs, Shells, Insects, Curiosities, Fine Showy and Crystalized Minerals, Etc.

The following specimens are all first class, and will be sent prepaid on receipt of price. Orders under 50c. must contain 6c. for packing and return postage.

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Asbestos, fibrous and nice 5c. Gold ore 4c. Silver ore 4c. Copper ore 4c. Lead ore 4c. Peacock ore 6c. Fluor Spar 4c. Aragonite 4c. Moss Agate 6c. Moss Jasper 4c. Wood Jasper 4c. Wood Opal 5c. Chalcedony 4c. Fortification Agate, polished, 50 to 75c. each. Petrified Cedar Wood 4c. Crystalized Palmurod 4c. Alabaster 4c. Pink Satin Spar 4c. White Satin Spar 4c. Selenite Crystals 4c. Amazon Stone 5c. Armanite 4c. Rhomb Spar 4c. Dufrenite 4c. Epidote 4c. Chrome Garnet, granular 4c. Alumi Garnet, a mass of imperfect crystals 4c. Stannite pyrites of tin 4c. Loadstone, strongly magnetic 4c. Vericite 4c. Wavellite 4c. Hot Springs Ark. Quartz Crystals in clusters 10c. to \$5.00. Hot Springs Quartz Crystals, points, 8c. to \$1.50. Prehnite, greenish hue 4c. Hypostibite 4c. Double-refracting Spar, crystalized in a mass 4c. Saccharoidal Limestone 4c. Dolomite 4c. Fossil Fish 'bodies,' "Baculites" their color changeable like silk and resembling "Mother of Pearls" $\frac{1}{4}$ to 5 inch, 50c. to \$1.00.

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329a.	Bluff-breasted Flycatcher,	2.00
349.	Rufous Hummingbird,	.35
343.	Calliope Hummingbird,	1.00
355.	Poor-will,	1.25
357a.	Western Night Hawk,	.50
363.	Texan Sapsucker,	1.00
369a.	Red-naped Woodpecker,	.50
370.	Black-breasted Woodpecker,	1.50
376.	Lewis Woodpecker,	.75
377.	California Woodpecker,	.30
378b.	Red-shafted Flicker	.40
385.	Road-runner,	.75
405.	Great-horned Owl,	2.50
431.	Cooper's Hawk,	.60
432.	Sharp-shinned Hawk,	.40
436.	Red-tailed Hawk,	1 ad. 1.25 1 yg. 1.00
448.	Ferruginous Rough-leg,	4.00
483.	Gambel's Quail,	1.00
484.	Scaled Quail,	1.00
485.	Massena Quail,	3.00
526a.	Wilson's Snipe,	.35
550.	Solitary Tattler,	.25
565.	Wilson's Phalarope,	.50
601.	Mallard,	1.00
609.	Blue-winged Teal,	.75
612.	Green-winged Teal,	.75
615.	Little Blackhead,	.75
621.	Butter-ball,	.75
638.	Hooded Sheldrake,	1.00

All skins are my own make and are warranted *first class* in every respect, either for cabinet specimens, or for mounting, are labeled with species, number, date, locality and sex; the latter carefully determined in every case by dissection without regard to plumage. In all cases where skins do not give perfect satisfaction they may be returned and the money will be refunded.

Skins of small birds only will be forwarded by mail, prepaid, where the order amounts to \$1.00 or more. under \$1.00 add 5 cents for postage.

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CHARLES H. MARSH,

Territorial Taxidermist,

Silver City, - - New Mexico.

THE ORNITHOLOGIST.

VOL. 1.

TWIN BLUFFS, WIS., NOV., 1885.

No. 6.

FOR THE ORNITHOLOGIST.

The White-rumped Shrike.

Of the many birds to be met with in this neighborhood, the White-rumped Shrike, is certainly one of the most universal inhabitants.

Wherever you go, in valley or highland, in thick groves or isolated trees on barren plains, this bird is sure to be found, and you always find him at home, wherever he is; he always manifests the same haughty indifferent air, and when disturbed acts as though his private domain had been infringed upon and the intruder should receive his deserts accordingly.

His food consists principally of small insects, beetles, grasshoppers etc, but he never hesitates to destroy small birds, lizards, and even young snakes, when they are so unfortunate as to "come in his way." Indeed he has become so audacious in this vicinity of late, that he went so far as to approach our very house; where the pet canary was enjoying a little fresh air—his cage being hung in the open balcony—cruelly pouncing upon the little singer, and perpetrating a cold blooded murder by unceremoniously pulling his head off. Now *that* is carrying matters too far, but still the "Butcher-bird" is not satisfied with killing our canaries, but attacks our young thoroughbred, three-day-old chicks, and out of a litter of twelve or thirteen disposes

of six or seven in the same manner as he does the birds, apparently for no other reason than to see the little victims "kick and squirm." Now that does settle it; as a personal sufferer from his ravages; and a desire for "sweet revenge," I shall in the future endeavor to unscrupulously dispatch every Shrike that dares to show itself in this vicinity. In another column a clipping from a paper of this place, shows that other persons besides myself are waging war upon this little tyrant, for the same reason.

The White-rumped Shrike is a very prolific breeder laying from four to seven eggs, and often produces as high as four sets in a season; fresh eggs can be found in this locality at any time from the middle of March to the middle of July. April and May however are the most profitable months to obtain eggs of this species, in large quantities and in prime condition.

The Shrike generally chooses a thick close shrub or tree for a nesting place, and the orange and lemon trees appear to be its favorites here, although the bird will take almost any close bushy tree that comes convenient. The exterior of the nest is composed of thorny prickly twigs, especially the small coarse limbs of a shrub called the tumble-moss whenever that is obtainable. The interior is composed of finer and finer material, as the nest nears comple-

tion, and is finally lined with a fine soft coat of wool and cotton rags.

The yellowish white eggs are thickly spotted with small dots of a greyish brown color, the spots growing denser as they approach the larger end; in size the eggs will compare favorably with those of Brewer's black-bird.

Strictly speaking the Shrike is not a flock bird but goes through the world on his "own hook," or at least never acquires a larger amount of company than that of his true and devoted mate. During the period of incubation, especially after the appearance of the young, the old birds become very bold on an approach to the nest, and will fly around a persons head in very menacing attitudes.

I have often placed my hand over the nest, for the sake of observing the actions of the old birds; they become very restless hopping around close to my hand, and some times approaching so close as to almost touch my fingers, but instantly with drawing to a safe distance upon the slightest movement of my hand. All this time they will be indulging in their peculiar snapping noise, which I never hear them make use of except on these occasions.

The Shrike is the avowed enemy of the bee-martin and many a desperate fight have I witnessed between these well matched and determined little warriors. The successful party on such occasions generally being the one in closest proximity to his individual nest. I have also witnessed several interesting

combats between this bird and the sparrow hawk, but lack of space prevents me going into further details.

A. M. SHIELDS.

Los Angeles, Cal.

You spoke in a late issue of the TIMES of the butcher birds being so bad in Los Angeles. They got so bad here that we have waged war on them with a shot-gun. They not only pulled the heads off of our canary birds, but killed young chickens. Our chicks were not safe until they were two or three weeks old, and many of them came to their death by the worthless butcher bird. Over three hundred of the above named birds have been shot in this valley this season.

Los Angeles Daily Times, August 5, 1885.

FOR THE ORNITHOLOGIST.

Canadian Wild Birds.

By W. L. KELLS.

III.

THE RED-BELLIED NUTHATCH.
(SITTA CANDENSIS.)

In size and color this species is similar to the more common, White-bellied Nuthatch; its lower parts, however have a reddish hue; its notes though also similar, are more prolonged and plaintive.

This Nuthatch is generally found only in the deep evergreen woods where it remains throughout the year. It makes a nesting place for itself like the woodpecker, or chick-a-dee, in some soft rotten wood, and when this cavity is of sufficient size and depth it makes a nest of fine material at the bottom, and lays

four or five eggs similar in color and size to those of its white-bellied congener.

IV.

THE BROWN CREEPER.

(*CERTHIA FAMILIARIS RUFA*.)

This diminutive species is also a perennial resident of the wild-woods of Canada, and derives its name from its habit of climbing the trunks and branches of trees, but in ascending only, and with a kind of jerking motion. When it has climbed one tree as far as it desires to go it flies directly downward to the roots of another, and proceeds upwards as before, eagerly inspecting every crevice in search of insects and larve, upon which it subsists. It is at times difficult to get a good view of this active little forester, not only from its bark-like hue, but from its always attempting to conceal itself from view, by creeping to opposite side of the tree, particularly when it becomes aware that it is the subject of observation.

The Brown Creeper is four inches in length the plumage on the upper parts is dull brown, each feather being marked with white; the under parts have a greyish hue. Its bill is long, slender and hooked at the point; the long drooping tail terminates in stiff points, which assist in supporting it as it clings to the sides of trees.

In very cold weather, nights, and during storms, it takes refuge in hollow trees, and in such places it may sometimes nest. It begins to nest early in spring, and perhaps

indicates twice in the season. The only nest of this species that I have yet seen containing eggs (and which I secured for my collection),* was placed in the cavity of a dry hemlock tree, between the trunk and the bark nearly twenty feet from the ground. I saw the female at work collecting for its formation, and noticed that her mate gave her no assistance, except constantly to utter his notes of approbation, as he accompanied her to and from the nesting place.

Pieces of rough bark were first made use of, then strips of fine fibrous bark were appropriated, and finally different kinds of hair completed the nest. Six eggs were deposited, of a whitish color, mottled towards the larger end with pink spots.

The musical talents of this winter, wild-wood resident, are not to be despised; its song consists of several lively notes, which are often heard echoing in the wilderness, while the hardy little musician itself is invisible, even in the depths of winter. It is, however, most generally noticeable at that period of the year when winter is about to yield his ice-bound rule to the more gentle reign of spring.

It really wonderful how this little creature withstands the cold of the Canadian winter, but nature has evidently adapted every part of its organization to suit the life that its Great Author designed the little bird to lead; and consequently this, —though among the smallest of the

CONTINUED ON PAGE 46.

THE ORNITHOLOGIST.

A Monthly paper of Natural History.

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NOTES.

Professor Davie informs us that owing to the delay occasioned by ill health his “Egg Check List” will not appear *quite* as soon as expected; he adds:—“but I hope to send you the first printed pages within a few days.”

Birds have multiple stomachs, of which the crop is one part and the gizzard another, the true digestive stomach being another. The food is macerated in the crop, ground to pulp in the gizzard, and then digested in the stomach.

The second chapter on THE CARE OF MINERALS, by W. S. BEEKMAN will probably appear in the December number.

The Night Heron feeds chiefly at night; and is never seen standing motionless, like Herons but walks about in search of prey, by the sides of ditches, ponds etc. “It is a hunter after tadpoles, frogs, fishes, small crustaceans and various water insects.”

The Russian dog skin lately in high favor both with manufacturers and consumers owing to the fact that the buffalo was undergoing a rapid process of extermination, is in its turn about to be supplanted by the hide of the Galloway cattle, which aside from the defects of branding, is nearly the equal of the famed buffalo hide. The striking resemblance of the Galloway to a buffalo is the subject of constant remark, and it would not be strange if they succeeded the bison in supplying the world with its winter protection. They have the advantage of the buffalo in color and texture of fur.

The first use of cotton paper in Europe was among the Saracens in Spain, and cannot be traced beyond the tenth century. In Europe it preceded the use of flax for that purpose.

“Canadian Wild Birds.”

We understand that Wm. L. Kells the writer of *Canadian Wild Birds* now publishing in this paper, is engaged in compiling a book to bear the above named title. Mr. Kell’s writings are all very interesting to bird lovers and his work will probably be a second “Our Birds in their Haunts.” We wish the book and author all possible success.

An article on the birds of New Mexico, by Charles H. Marsh will be published in our next issue.

LAKE DISCOVERED IN THE CASCADES:—A lake twelve miles long and six wide, supposed to be the source of the Cedar and Snoqualinie rivers, has been discovered in the Cascade mountains to the north. The waters abound in fish; the beaver makes it his home, and mountain sheep and other game are numerous in the vicinity, Messrs. Hill and Imloch of Tacoma, are said to be the only white men who have visited this Lake. An Indian trail was found leading to it but from appearances had not been used for many years. Its elevation is 4,500 feet.

Cheering Words.

Framingham, Mass., Sep. 30., '85
Pub. ORNITHOLOGIST:—

"Sample copy received, appears well."

Respt.,
F. C. BROWN.

Columbus, O., Oct. 10., 1885.
C. L. McCollum.

Dear Sir:—

I have this day received two copies of your magazine—October issue—for which accept my hearty thanks. I am much pleased with your little periodical—it is exceedingly interesting and gotten up very neatly indeed;—is far above the average.—I am very much pleased with your magazine and wish it all possible success: Could I not obtain back numbers?

Yours Truly,
OLIVER DAVIE.

Deadwood, D. T.

Dear Sir:—

"Like appearance of your paper very much—"

Yours Truly,
L. W. STILLWELL.

New York, N. Y.

Dear Sir:—

"Allow me to congratulate you on the great improvement in your paper."

Ph. HEINSBERGER.

Silver City, N. M., July, 21, '85.
C. L. McCollum Esq.,

Dear Sir:—

"I am much pleased with the appearance of your paper. What would you charge for a full page ad., say the last page, change every month if desired, to run six months."

Yours Respt.,
CHARLES H. MARSH,
Territorial Taxidermist.

OUR TABLE.

The October number of *The Eagle* appears in rather an abridged form but they "will try hereafter to keep it larger than it has ever been before and get it out by the first of the month."

The Agricultural Epitomist is an exceedingly fine agricultural paper "containing one hundred pages of ordinary farm literature boiled down to 10, or \$10 worth of reading for 50c." It is published at Watsonstown, Pa., by J. Everitt & Co.

The Hoosier Naturalist appears in new form and dress and is more interesting than ever.

Where are the September and October numbers of *Rambles in Nature*. Come, wake up friend Wood.

"N. K." System of Arrangement.

A naturalist, traveling in the interior of Pennsylvania, stopped at a very neat, clean tavern, and was agreeably surprised to find the chimney-pieces, cupboards, etc., crowded with specimens of minerals and fossils, each of them bearing a label with N. K. on it. Puzzled by these letters, he sought for information of a smart-looking woman, who was the landlady. She informed him that her nephew, who was gone to Kentucky, was the owner of these specimens, and that he had pasted some long names upon them, he had learnt from the doctors in Philadelphia; but they were so hard to pronounce when her neighbors asked her questions about them, that she had taken them off, and put N. K. upon every one of them. The naturalist assenting to all this, asked her the meaning of N. K. "So you don't know what the meaning of N. K. is?" said she. "Upon my word, I have not the least idea," he replied. "Well," said she, "I thought the Philadelphians knowed everything; however, if you don't know I'll tell you. N. K. means 'Nayterul Kurossity.'"—*Young Oologist*.

There is a bird roost at Lake Gentry, in Brevard County, Fla., covering a tract of eighty acres, in which, it is estimated, over 7,000,000 birds gather every season. It has been a resting place for birds from time immemorial.

In the heart of Wyoming Territory is a mountain of solid hematite iron with 600 feet of it above the ground, more than a mile wide, and over two miles in length; a bed of lignite coal big enough to warm the world for centuries; eight lakes of solid soda, one of them 600 acres in extent and not less than thirty feet in depth, and a petroleum basin which contains more oil than Pennsylvania and West Virginia combined, from which in places the oil is oozing in natural wells at the rate of two barrels a day.

The oldest and at the same time the thickest tree in the world, so far as known, is a chestnut near the foot of Mount Etna. It is hollow, and large enough to admit two carriages driving abreast. The circumference of the main trunk is 212 feet.

CONTINUED FROM PAGE 43.

feathered race—enjoys its life in the winter months, when the frost is keen and the storm winds are blowing, as well as when its native wilds are clothed in the emerald garb of summer.

*Since the above was written, I have taken a nest of this species containing eight eggs.

TO BE CONTINUED.

LISTOWELL, ONTARIO.

FOR THE ORNITHOLOGIST.

The Bamboo.

The bamboo is a native of the hottest regions of Asia. It is likewise to be found in America, but not in that abundance with which

it flourishes in the old world. It is never brought into this country in sufficient supply for any useful purposes, being rather an object of curiosity than of utility. But in the countries of its production it is one of the most universally useful plants. "There are about fifty varieties, according to Loudon in his Botanical Dictionary, of the *Arundo bambos*, each of the most rapid growth, rising from fifty to eighty feet the first year, and the second perfecting its timber in hardness and elasticity.

It grows in stools which are cut every two years. The quantity of timber furnished by an acre of bamboos is immense. Its uses are almost without end. In building it forms almost entire houses for the lower orders, and enters both into the construction and furniture of those of the higher class. Bridges, boats, masts, rigging, agricultural and other implements and machinery; carts, baskets, ropes, nets, sailcloth, cups, pitchers, troughs, pipes for carrying pumps, fences for gardens and fields &c. are made of it. Macerated in water it forms paper; the leaves are used in covering tea sent to Europe. It is said to be indestructible by fire, to resist acids, and by fusion with alkali to form a transparent permanent glass."

JOHN B. WHEELER.

The Trumpeter Swan.

The BUCCINATOR, the largest of North American birds, sometimes attains the weight of forty pounds and measures five feet from tip of

bill to end of tail; extent of wings, seven feet.

The swan has a bill about as long as the head, of equal breadth throughout, higher than wide at the base, with a soft cere, the nostrils placed about the middle; The neck very long arched and with twenty-three vertebrae; the front toes fully webbed, the hind toe without membrane.

They eat about the same quality of food as ducks and geese, their short necked allies; and feed in the same way, their bills and necks in the water and their feet in the air to keep their balance. They eat vegetable substances, as, the seeds and roots of aquatic plants, but also feed on fish spawn of which they are great destroyers.

Swans have a hissing note like geese, which they emit when offended, and strike with their wings in defense or attack.

In color they are grayish white, tinged with yellow, except a reddish brown suffusion of the head and cheeks; feet and bills black, and eyes a dark brown.

The swan has a soft low voice, plaintive and with little variety, which is to be heard when moving around with its young. It is hardly necessary to add that their fancied musical ability, either in health or at the close of life, is not confirmed by listening to their vocal efforts, and is contradicted by such common names as "Hooper" for the European, and "Whistler" and "Trumpeter" for the American species.

CONTINUED.

ADVERTISEMENTS.

In answering advertisements from these columns please mention **THE ORNITHOLOGIST**.

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47	Least Tit	.60	.25
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149a	White-rumped Shrike	.40	.15
151	Cedar Wax-wing		.10
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217a	Western Chipping Sparrow	.60*	.20
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231a	Mount. Song Sparrow	.45	.30
231b	Heermann's Song Sparrow	.75	.20
231c	Cal. Song Sparrow	.65	.15
238a	Spurred Towhee	.70	.40
240b	Cal. Brown Towhee	.75	.20
242	Cardinal Grosbeak		.10
244	Rose-breasted Grosbeak	.55	.18
245	Black-headed Grosbeak	.70	.20
248	Indigo Bunting		.12
251	Painted Bunting		.20
258	Cowbird		.03
259	Bronzed Cowbird		1.00
260	Yellow-headed Blackbird	.45	.10
261	Red & Buff-should'd Blackbird	.30	.02
263	Meadow Lark		.15
264	Western Meadow Lark	.60	.20
269	Hooded Oriole	1.20	.75
270	Orchard Oriole		.10
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271	Baltimore Oriole	.35	.10
272	Bullock's Oriole	.60	.15
274	Brewer's Blackbird	.60	.08
275	Great-tailed Grackle	.50	.60
278	Purple Grackle		.05
280	American Raven	2.75	1.65
282	Common Crow	.85	.10
289	Blue Jay	.35	.08
293	California Jay	.80	.30
301	Scissor-tailed Flycatcher		.18
304	Kingbird		.03
306	Western Kingbird	.50	.10
307	Cassin's Kingbird	1.50	.45
315	Phoebe; Pewee		.04
316	Say's Pewee	.65	.30
316	Black Pewee	.65	.20
317	Western Yellow-bellied Flycatcher		.35
323	Little Flycatcher	1.00	.45
325	Least Flycatcher		.12
326	B'k-chinned Hummingbird		.75
336	Parauque Goat Sucker		4.00
356	Western Night Hawk	.90	.60
357a	Nuttall's Woodpecker	2.00	1.40
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385	Road Runner	1.50	.50
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454	Turkey Buzzard	3.00	1.00
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470a	Wild Turkey		.85
482	California Quail	.90	.20
487	Great Blue Heron		.30
489	American Egret		.25
490	Snowy Heron		.18
492	Louisiana Heron		.18
493	Little Blue Heron		.18
493	Green Heron		.12
495	Bl'k-crowned Night Heron	1.50	.51
557	Spotted Sandpiper	.35	.12
579	Florida Gallinule		.15
580	American Coot	1.00	.15
618	Redhead		.35
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THE ORNITHOLOGIST.

VOL. 1.

TWIN BLUFFS, WIS., DEC., 1885.

No. 7.

FOREIGN CORRESPONDENCE.

THE BLACKBIRD.

(TURDUS MERULA.)

Common throughout the country and remaining with us all the year round it is no wonder that the Blackbird enjoys so large of public favor. His loud and melodious voice which may be heard wherever there is sufficient cover to screen him from too intrusive observation, and his strikingly handsome appearance combine to secure for him a general welcome. The plumage is very beautiful being a glossy black in the adult male, the bill and orbits of the eyes bright yellow. The female is blackish brown above, breast reddish brown faintly spotted with a darker tint and the bill and eggs dark. During the first year the male resembles the female in color.

The ordinary song, which continues at intervals from early spring until the moulting season, is remarkably clear and full of a succession of detached notes with intervals between. The bird is also possessed of imitative power and has been known to counterfeit the crowing of a cock and the nightingale song with considerable accuracy. When disturbed the blackbird flies off uttering a long and peculiar chuckle half of alarm half of defiance which serves as a warning to all the birds and other game in the vicinity and consequently is exceedingly irritating to the sportsman whose mark frequently takes alarm at a critical moment.

During the summer months the blackbird pays a good deal of attention to the fruit in garden and orchard and by his unceasing de-

predations therein often brings upon himself the vengeance of the gardener. As soon as the first indications of spring appear the blackbirds commence nesting operations retiring to some secluded spot such as a holly plantation in which tree they delight to build as it affords a protection from almost every kind of enemy except the rapacious school-boy. I have found nests containing eggs as early as the middle of March when the leaf buds on the hedges had hardly begun to burst. The middle of April, however, seems to be the time selected by the majority for commencing to build in sober earnest and from that time up till the end of June the eggs can be procured in great abundance.

The nest is nearly always placed with a view to concealment and although large is in some cases by no means easy to detect. It seldom, however, escapes the observation of a practiced hand although a novice might easily pass it by. The sites chosen are very various and the material with which it is constructed is often carefully chosen to match with the surroundings. On a fallen trunk against the side of a living tree, on a stump, in a hedge, at the roots of the hedge, sometimes in the cavity of a decayed tree the nest may be found. High up among the boughs it is sometimes placed and many an inexperienced nest hunter has tackled a tough climb only to find to his disgust that the reward of his toil was a thriving young family of blackbirds. The nest itself is built of bent roots and twigs lined with mud and clay so as to form when dry a hard and substantial wall. This is lined

with fine soft grass and the nest is ready for the eggs, four or five in number. They are of a greyish blue or green color and are more or less speckled with light brown, they vary however in color to a great extent some specimens being almost devoid of markings while others are so thickly blotched and spotted that the ground color is scarcely distinguishable.

The difference too in the size is very striking I have before me an egg produced by a black-bird which presented a curious freak of nature the whole of the head and neck and part of one wing being white. This egg which was one of the four laid in the same nest is of extraordinary size being half as large again as any of the others.

I am fearful of absorbing too much space and hope I have not already exceeded my just proportion I can only plead as an excuse my fondness for the Merle as Shakespeare calls him and trust my fellow collectors will not find this brief account of a common English bird tedious and uninteresting.

L. HAYTER.

CANADIAN WILD BIRDS.

BY W. L. KILLS

V

Humming Birds.

There are many varieties of this genus found on the American continent, but only one species—the Ruby-throated Hummingbird—is known to visit Ontario. Two other varieties—the Anna and Rufous-ruffed Hummingbird—are summer visitants in the northwest territories and British Columbia, while other species are found in the islands on the Pacific Coast.

THE RUBY THROATED HUMMINGBIRD.

(*Trochilus colubris*.)

This much admired, and very interesting summer visitor, is the

smallest of the feathered race that can be recorded among the birds of Canada. In the early part of June—if the weather is warm, and our woods and fields have begun to assume the emerald garb of summer, when the orchard trees are laden with young fruit, and many flowers of varied hues are about to bloom and delight the senses of sight and smell with their beauty and fragrance—the attractive form of this animated gem of nature may be seen darting among the berry bearing bushes or hovering over some newly opened flower, from the recesses of which, by means of its long straight bill and threadlike tongue, it draws forth with rapidity the minute insects and sweet nectar, which constitutes its daily food. The plumage on the upper parts is black with a changable greenish purple hue; the throat is deep crimson, or ruby red; and the underparts have an ashy tinge.

When flying or feeding, the wings move with such rapidity as to be almost invisible to the eye of an observer though only a few yards distant.

This rapidity of motion causes that humming sound from which the bird derives its name.

The nest of the Humming bird is a neat compact little structure, formed of downy materia's, the outside of which so closely resembles in color the branch on which it is placed that at a short distance it may be taken for a small knot. Two pure white eggs are laid and carefully guarded by the little owners, who seem to have exalted ideas of their own importance.

A Georgia paper gives the following description of a humming birds nest that was recently brought to its office:—"It was set upon a limb of a tree the size of a man's thumb, and coated on the outside with the moss of an oak, so as perfectly to

resemble a knot. It was about the size of a large hickory nut, an inch high, and constructed of cotton and hair. It contained two white eggs about the size of a common snap bean."

The Hummingbird is very passionate and courageous, and will attempt to drive off other species many times its own size; it also quarrels with members of its own species—fierce contests between the males are of frequent occurrence. Nor does it hesitate to attack even mankind when its nest is approached. When excited it makes a peculiar sound and sometimes utters squeaking notes like a mouse.

The following item from an American paper illustrates the pugilistic disposition of this species and the fatal end to which it sometimes leads. "A mortal combat between a humming bird and a bumble bee in a flower garden, was witnessed Sunday morning. The bird was gathering its breakfast of honey from a bunch of lilies, when it dipped its long bill into a blossom occupied by a bumble-bee, and the enraged insect immediately flew out to battle. Two or three slight collisions, hardly occupying as many seconds followed, and then the hummingbird with the tiniest note of pain darted off and dropped dead in the grass not five yards away. It had evidently been stung to death."

When not disturbed in its recreations about the garden the humming bird becomes quite fearless and will even enter houses to feed on flowers placed in the windows.

Towards the latter part of August it again departs from this country for the warmer regions of the tropics, where with many others of its race it passes that season when drifting snow and piercing frost hold domain in northern climes, and to these it returns when winters reign

is over. Thus the short life of the Humming bird is passed in an unbroken summer "where verdant spring unceasing reigns, and flowers forever bloom."

LISTOWEL, ONTARIO, CA.

A Queer Necklace.

Mr. W. E. Curtis of the South American commission has given Tiffany & Co., of New York, an extremely queer order. It is nothing more or less than a necklace of Mummy Eyes. Mr. Curtis sent, with the order, a few dozen little objects which looked like brown amber, and very much resembling a new shade of opal.

Mummies are very plenty in Peru, and in place of the human eye, the native embalmers used the eye of a fish, with a long latin name. The human eye decays very rapidly and the eye of this fish, after being hardened, takes its place and gives a very natural look to the face, which was the great object of embalming.

These eyes look like very fine brown amber and shine with a dull lustre like an opal without fire.

Tiffany & Co. were obliged to polish the eyes, and strange to say, several of the men who were at work on them became suddenly ill. Some person went so far as to accuse the innocent mummy eyes of being the cause of it.

It is stated that the necklace is very pretty and will last a long time if kept dry.

TIMOTHY HAYSEED.

Mineralogy and Geology.

On the Care of Minerals.

W. S. BEEKMAN.

SECOND PAPER.

The idea I intended to convey in regard to labelling, seems to be omitted in the last issue. Many collectors devote space on labels to writing '*time collected*' and *collector's name*' which is useless on minerals; having if you choose, your own name on, makes it have a neater look, but the other is superfluous, and is better used on insects, eggs, etc.

It is better to avoid pasting labels on specimens, unless you have a neat, small size, as it generally detracts in looks. The label given in last is good where the specimen is kept in a tray and not liable to get misplaced, as when just kept loosely on a shelf, unless pasted to the mineral, it is very apt to do.

The color of trays are neater, white, if of a good quality; however, an ultramarine blue is the best color, on most specimens, to show them off. Our Boston Society have placed their specimens, to a good advantage on their colored trays.

It is well when one can get a sheet of printed numbers, to paste the specie number on, if no other label is attached, as, at some time the larger labels might get misplaced, and the mineral would not be recognized unless this permanent feature was present.

In regard to cleaning specimens, which should be the next step taken, after trimming, hardly enough attention is given by the amateur worker. Where one forms their collections by purchasing of a reliable dealer, or exchanging with competent collectors they should not receive specimens in a condition that would require any other attention but dusting. Where personal

collections are made, on the majority of specimens, to bring out their full beauty, they must be subjected to the following process. If consisting of delicate crystals, never use a brush, unless they be quartz crystals. Try first the power of water in simple rinsing. If that fails to remove all blemishes, try warm water and suds. There will be some varieties that can not stand even these simple methods. Thus a millerite can hardly stand even a gentle blowing, and if put under a faucet to rinse, it would meet the fate, that the religious sect, *millerites* expect to meet. The cleansing of moss from surface rocks, is best effected by using a strong solution of washing soda— Na_2CO_3 —Should your specimen be covered with iron stains, *and not be calcite*, but QUARTZ, which is generally thus coated, soak for 24 hours in a strong solution of *Oxalic acid*. This acid can be advantageously kept in a jar, as it is always good to use one part acid and six parts water. This makes a concentrated solution, and when too dirty for future use can be poured off and half as much water added to the remainder. After this soaking, *always recollecting never to put in calcite, which would be decomposed*, as simple washing will generally take the acid, and what stains are left, off. A stiff brush is convenient to use in many cases; also, a test-tube brush or a sharp stick with cloth tied to it, to reach in between long crystals.

Many species need rougher treatment than this, and among them are copper ores.

Copper is very difficult to keep free from tarnish, and a black dirty copper is an '*Elephant*' in a collection. For a pure copper I use *hydric nitrate*— HNO_3 —pour right on the ore and quickly rinse off. It does not take an instant for it to eat the oxide, and leaves the copper nice

and bright. The copper should be then dried, and after drying, it should be burnished briskly with a dry stiff brush. This gives it a shiny lustre, and retards its further oxidation. If the copper is covered by calcite and the calcite objectionable, I prefer *hydric chloride—Hce*—as it will better dissolve the calcite.

Many specimens can be greatly improved, both in looks, and in value, by treating as above. Thus, a piece of byssolite in calcite, like the Venora variety, is attached to a handle, and then dipped in *Hce* until effervescence ceases, (*it is supposed operator will use only enough acid to cover specimen, as, should a great excess of acid be present the effervescence would cease only, when specimen was entirely gone*) now, add a little water, and after the new effervescence has lost its briskness, carefully wash in clear water. If the specimen is now examined with a glass, the fine fibers will be seen sticking out in all directions, producing a regular net work of hairs. Any other mineral occurring in crystals in calcite may be thus brought out in relief. Spiral crystals are often finely brought out. I have one that stands out by just the point being attached to the calcite. When a franklinite is thus treated, if, as there generally is, any willemite, or troostite, crystals, use *dilute acid*, made by adding 25 per cent the bulk of *Hce*, of water. Strong acid will decompose and spoil the willemite. Many other examples might be given, but enough has been said, and each operator can carry out the idea. This was neatly done, by a party in Mich. As the story goes, some prospectors while on an exploring expedition came across a large vein of pure copper projecting out of what proved to be a boulder. As soon as they discovered it was a boulder, their excitement over the discovery gave way to

yankee shrewdness. They covered the copper in places with *HNO₃* and sometime after poured on ammonia water and a solution of washing soda. The acid formed green nitrate of copper, the ammonia made streaks of a blue hydrate, and the soda formed insoluble carbonate from these. The rock thus on a years exposure to atmosphere, in a protected place, from direct rains, gave copper, blue, and green malachite. Now this combination is generally very rich. So having bought the land surrounding, the year previous, they sold it for mining purposes at a good round sum, and skipped before the end of the boulder was reached.

Other methods of cleaning will be found necessary, such as mica specimens by a mechanical operation by simply cleaving top layer off with a knife, etc. There is one specimen, that, when it occurs in choice specimens, is beautiful and rare to most cabinets. Yet I have on hand a few valuable pieces, and it is to warn any reader who may happen to receive some, *never rub, brush or even touch* with your fingers a stilpnomelane chalcidite. These specimens look good and solid, but they are very easily rendered worthless if touched. The lustre is changed to a greenish brown dull material. To protect millerite from dust and danger of being touched, I recommend the packet to be kept covered by a thin tin plate, kept adjusted by means of a rubber band. Black Iron Garnets that are dull or rusty, are often improved by rubbing with a cloth wet in kerosene.

The next paper will consider methods of arranging, analysing and polishing.

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NOTES.

The lapwing differs chiefly from the plovers in having a hind toe, which, however, is small....The *cony* of the OLD Testament is with the greatest probability supposed to be the *syrian daman* or *ashkoka*....We are promised an essay on *ornithology* for our next issue by a prominent eastern collector; Mr. John B. Wheeler will contribute an article on the *Bald-headed Eagle*; and Chas. H. Marsh of Silver City, N. Mex., will aid us by a chapter on New Mexico birds....The *Moloch* an Australian species is considered the most ugly and repulsive of all the saurian tribes....The nightingale and the crow have vocal organs similarly constructed; yet one sings the the other croaks....J. A. Singley's eggs and skins are very fine, and collectors will do well to give him a trial order. Read advertisement on third page cover....The *STAR* cites the finding of a flying squirrel's nest in the center of a store, of honey, by a New York wood chopper.

That must indeed have been "Home Sweet Home."

OUR TABLE.

Tidings from Nature, published by H. M. Downs, Rutland, Vt., is the best Natural History paper we receive since Frank H. Lattin disposed of the *Young Oologist*....*The Naturalist's Companion* is the title of an excellent paper from Chas. P. Guelf, Brockport, N. Y.....No. 5, of the *Pacific Science Monthly*, contains excellent chapters on "Science and Modern Discovery," and "The Ancient Mound Builders."....*The Naturalist in Florida* is one of the best. Published by C. J. Maynard, St. Augustine, Fla.....*The Hawkeye Observer* an eight page Monthly Journal of Natural History and Science from Davenport, Iowa, is brim full of solid reading, and reflects great credit on its editors....*Our Ideas* is one of Amateuedom's best literary publications....Have not received *Randon Notes* for some time....*Doognland Aquiverinn Cirndi*, is an interesting publication from Vienna....*The Western Oologist* has not visited us since September, we hope they will "in a more continueate time, strike off this score of absence"....*Gleanings* is a readable paper from Arlington, Texas...*The Globe*, Abbott Village, Me. contains several good articles.....*Plain Talk*, Brooklyn, N. Y., well deserves its name....*The Southern Geologist* is the best paper for collectors. Mr. Murkin, its editor, is an authority on mineralogical questions....Has *Greetings from Nature* suspended?...*Mistletoe*, the young debutant makes a very neat appearance....The Natural History Dept. in the *Mystic World* is exceedingly brief....The October number of *The Enterprise* contains an excellent history of "The Gutenberg Bible."....*The People's Press*, Flushing, Mich, contains several good articles and two interesting stories....*The National Amateur* is a very fine paper and the Official Organ of the National Amateur Press Association....E. M. Haight's *Monthly Price List* contains some excellent bargains.

THE TRUMPETER SWAN.

CONTINUED FROM PAGE 47.

Nor are their musical abilities confirmed by examination of their vocal apparatus. The windpipe is three feet long and is coiled up in a horizontal coil, in a cavity of the keel of the breast bone, doubling on itself and then emerging to return to the lungs. There are no laryngeal muscles or other apparatus for modulating the voice as is the case with singing birds. The extreme length and flexibility of the neck, their movements and attitudes when in the water, are proverbially graceful and elegant. "Her neck was like the swan's" says Burns of Anna Laurie, while "graceful as a swan" and soft as swan's down" are common figures.

The nest of the trumpeter is a large mass of reeds and rushes, placed on the ground in marshy places in which it lays six to ten, dirty white oval eggs 4x2.5 inches in size. They breed from Iowa and Dakota northward, chiefly in the Mississippi Valley.

OLOR AMERICANUS.

"The whistling swan, rare in the interior but common near the coasts, especially of the Arctic region of the continent. The whistler weighs twenty-four pounds. It is common off the Chesapeake from November to March, then going north to breed. Under 5 years old it is considered the finest eating of any water fowl on the bay, having the flavor of the goose, but far more tender. It is very noisy, and the 'song of the swan' which is audible for several miles, varies from the lower notes of a tin horn through the various modulations of the cornet. On the bay they are taken by sailing down on them as they rise hard against the wind and shooting them through the long neck. The downy body is shot proof. Hunters also paddle into the flocks, wearing white dresses, and with boats covered with ice, then knocking them down with poles. These birds molt in July and then cannot fly. At that time the Indians about St. Michaels, Alaska, spear them with bone tridents." Its nest and eggs are similar to those of the trumpeter swan. It breeds only in the far north.

C. L. M.

An Australian naturalist has recently discovered that the sponge has a well developed nervous system which he has accurately described.

Grass Lake, Mich., Nov. 6th, 1885.

Editor ORNITHOLOGIST, Dear Sir:—

As I have a few moments at my disposal thought I would inform the readers of your paper of a little adventure I had this season, I had noticed a shite-poke several times flying around an old crows nest and though believing that they always built on the ground my curiosity was aroused.—she had been seen carrying sticks and other material into those woods—and I determined to climb to the nest. The next time I went that way I took my climbers along and up I went, to the "tiptop," the supposed crows nest turned out to be a red squirrel's nest and I proceeded to investigate, where, too I was surprised to find it occupied not by the squirrel, oh no! but by bumble bees, who gave me to understand by their buzzing that I was not welcome. It was a hot day but the rapidity with which I descended that tree was astonishing.

On my way home I struck with my boat an old stump, you can imagine my surprise to find that also occupied, not by bumblebees but by a black capped chickadee, the set contained seven eggs which I took with the nest as I supposed the bird would forsake it, as the roof of her house had been knocked off. I found several other sets of various kinds and returned home well pleased with my hours work.

Respt. Yours,

F. H. O.

FLYCATCHER.

Kingbird.

(TYRANNUS CAROLINENSIS)

A common summer resident arriving about May 1st. Nest composed of dry stalks, weeds, and grasses, and often contains the weed know as ladies tobacco. An eccentric one once placed her nest underneath a trundle bridge over which trains were constantly passing. The nest in this case was composed chiefly of greasy tow.

Least Flycatcher.

(EMPIDONAX MINIMUS.)

Common summer resident. Arrives about the 20th of April and departs before September 15th. Her nest is composed of cottony substances, threads and occasionally hair. They capture insects with surprising celerity. Darting from some branch where they have been perched in waiting they snap in their prey with a clip of the bill and return to

their starting point. Four eggs are laid about May 25th. They are cream colored with no markings.

Great crested Flycatcher.

(MYIARCHUS CRINITUS)

A rare summer resident. Arrives about May 15th and their nest is finished about June 5th. The complement of eggs is generally five rarely six. The nest usually contains cast off snake skin. The eggs as all know are curiously streaked and blotched, as with a pen and ink, on a buffy ground.

Pewit Flycatcher.

(SAYORNIS FUSCUS.)

A very common summer resident. Arrive in latter part of March and the nest may be found with full complement of eggs by May 1. The average five, rarely four. The nests are usually composed outwardly of mud lined with hair and moss plastered under a beam or underneath a bridge. The eggs I find are commonly spotted about the crown. They depart about Oct. 14 or before.

Wood Pewee.

(CONTOPUS VIRENS.)

Not common summer resident, arrives in latter part of May and nests after the middle of the following month. I have seen fresh eggs as late as June 29. The nest is a beautiful but fragile structure and is composed outwardly of mossy substances. They generally build their nest near the forked end of a rotten limb or branch which usually renders them inaccessible. It is a shallow affair and contains as a set, three eggs. Creamy ground blotched with a beautiful brown about the larger end. They depart as early as Sept. 10.

Traill's Flycatcher.

(EMPIDONAX PUSILLUS TRAILL.)

Known in this country as a migrant and a rare migrant at that.

C. H. A.

Packing Specimens.

It is rather late this season for any hints on collecting and too early for next year; so I have chosen this subject and think that a few ideas may be given which can be profitably heeded by many of your readers.

It is safe to assert that, fifty per cent of the fragile specimens sent through the mail are ruined owing to the careless manner in which they were packed.

As most collectors depend on their exchanges to increase the number of their specimens, they should be careful to prepare their mail package so that they may have no breakage to make good.

At one time I received a pasteboard box full of eggs, by mail. I think I found two whole eggs out of the lot. Lately a box was received containing a large number of eggs which had been simply laid in the box on a layer of cotton, and covered with another layer. Nothing is so aggravating as to open such a box. You expect to get some good things but on taking off the cover find many specimens broken, and of course the broken ones are the best.

In this I shall try and give a few simple directions for packing so that the chances will be in favor of specimens reaching their destination safely, and first for eggs.

Always use a wooden or tin box—never pasteboard. Cigar boxes may be obtained of different size, and are light and strong. If a large number of eggs are to be sent it is better to put them in two or more boxes than in one large one, but if the one box is used it should be strengthened by placing one or more partitions in it.

Place a layer of cotton in the bottom of the box, wrap *each* egg separately in cotton and when one layer of eggs is placed in the box,

cover with cotton and so on till full, or nearly so, then place enough cotton on top to securely hold all in place when the cover is on.

Shells should be separately wrapped in paper, and the delicate ones should be filled with a wad of cotton and also wrapped in cotton and packed in some kind of boxes as eggs.

Minerals should be wrapped in paper, each specimen separately. The fragile crystals or specimens should be still further by cotton and placed in small boxes—not packed in with the heavier specimens; the same of fossils. Never pack minerals in sawdust, they may travel safely, but do not give the receiver nearly as good an impression, on opening the box as though they were packed in paper. In order to avail yourself of the merchandise postage rate (1ct. per oz.) the package must contain no written matter except that it is allowable to number each specimen to correspond with list sent in letter, or to place a simple label (name, locality, date, etc.) with each. Anything in the shape of correspondence subjects the package to letter postage, (which the receiver must pay) and the sender to a fine. Besides the address of the party to whom you are sending, write your own address in one corner preceeded by the word "from," then in case package is not delivered you will receive it back from Dead Letter Office.

Some of your readers may say "I knew all that before." I do not doubt but that many of them do, but I *know* from my own experience that many of them do not, and for such I have written.

Do not nail covers to boxes, they must be left so that the contents can be examined if deemed advisable at the first office. If sealed or fastened letter postage is charged.

D. H. E.

Bird Stories.

One day last spring a resident of the North End had his attention called to an oriole that was in some serious trouble. Examination showed that it was fastened to a limb by one of its nest strings. A lad disengaged it, and it flew away. Later in the day the boy saw a bird fluttering in the grass, and after catching it, it proved to be the same bird, a remnant of the string being fastened about its leg in such a way as to disable it. It was freed again, and returned to its nesting place. Nothing more was thought of the matter until one day last week. The family had noticed the constant chirping of a young bird for several days, and it became so annoying that a search was made and one of the young orioles was found hanging from the nest on the same limb where the old one was caught. It had a hair twisted around one leg, and so bound that it had cut into the leg as it grew and disabled it. Around the body was a piece of string which was removed with considerable difficulty. Apparently the old bird is particularly clumsy. She almost killed herself, and then almost killed one of her young by the same awkward use of materials from the nest, or in the latter case, from making the nest in such a way that it served as a trap for the young bird hatched in it.

At the same house, robins have nested under the stoop of the front door, and also under the roof of the piazza and at the side of the house, and come and go undisturbed by any such trifle as the presence of the owners of the place.

An amusing incident happened in connection with these birds. A small cherry-tree about thirty feet from the nest of one pair was loaded with fruit and it was decided to make an effort to save fruit from their depredations. So the tree was

literally hung with streamers and presented quite a holiday appearance. There was much hope of the result, but one day last week, when it was thought the cherries were about ripe, a member of the family went out to try them. The tree bore nothing but streamers—the robins had taken every cherry.

A funny little situation was developed at the house of Mr. Oscar Fowler, on White Hall farm, the property of Mr. William Ward Henderson, near Elkton, Md., lately. Mr. Fowler lives upon the river shore, and is fond of gunning and fishing. For these purposes he has a suit of india-rubber to protect him from the rain. The season for both of these diversions being about over, he, a short time ago, hung his rubber coat out where it could get a good airing. No attention was paid to it until a day or two since, when Mr. Fowler thought it time to take it in and put away. When he took hold of it he observed a suspicious swelling about one of the pockets, and thinking he might have left a handkerchief or some other piece of property therein he put his hand into the pocket. It came in contact with something strange to him, and upon withdrawing it he found a cute little nest and several tiny eggs snugly fixed in it. Presently he heard an anxious twitter near by, and, looking up, there was a pretty little jenny wren begging him not to destroy her spring-time work. Mr. Fowler placed the nest and its contents in a convenient hole in an apple tree near by, and now Mistress Wren has a promising brood of the funniest little wrens ever seen.

Propagation of English Sparrow.

Ten pairs of English sparrows were let loose in Adelaide, South Australia, a few years ago, and now

they have probably 2,000,000, not spread over the colony, but crowded into the settled districts, for they feed almost entirely on the fruit and grain produced by cultivation. A recent letter from Adelaide says, "The sparrows are now busy picking off the almond fruit buds as they swell, and the peach, apricot and plumb will be attended to in due course. Should any buds be spared, the sparrows are early in their attention to the ripening fruit, and the grain before ready for reaping, will be cleared by them. In the sparrows we have an enemy far worse than the red rust, locust or Russians, and what with the favorable climate, the absence of natural enemies, and the immense breeding grounds in the ranges, my impression is that unless some effective remedy is found the whole colony will, in less than twenty years, be reduced to a mere sheep walk."

Bird or Beast.

"I have one important item of information to impart. Last fall a mysterious despatch was sent to the British scientist at Montreal, saying that the missing link had been found in Australia. I went there, and have brought back thirty of these strange creatures, a group of the ornithorynchus. This is the most remarkable of scientific discoveries. This strange animal is the connecting link between birds and animals. It looks like the beaver, but instead of having hair on its back it has scales and in place of scales on its tail it has hair. This in itself would not constitute a missing link, but after long investigation we find that it lays an egg like a bird, but suckles its young like a mammal. Its habits are like the beaver's, but it is an utterly heterodox creature and entirely the most unnatural known."

The Great Gray Owl.

We find the following interesting description of the great gray owl in one of our exchanges:

This is one of the largest kind of owl found in America, and perhaps equals any known elsewhere, measuring two feet in length, wing 16 to 18 inches (from the bend), tail 11 to 12½. The eyes, rather small for the size of the owl, are yellow, the short strong bill and claws paler. The plumage is grayish-brown and grayish white in alternate bars, the pale ones widest beneath. The back and breast have more irregular wide stripes of same color, and on the face they form rings.

From its ashy colors, this species was named nearly a century ago *Strix cinerea*, and has retained this specific name among naturalists ever since. It inhabits the northern portions of America, rarely wandering south of latitude 42°, though no doubt to be found on the lofty mountain ranges of Western America much farther south, and has been reported to occur in the Sacramento valley. Another kind, however of similar plumage, but a fourth smaller (the Western Barred owl), may have been mistaken for this. A paler variety, known as the Lapland owl, is found in the most northern parts of Europe and Asia. Like the American birds they live in the thinly wooded regions surrounding the Arctic circle, within which, the Snowy owl, nearly equal in size, take their place, and as it wanders much farther south in Winter, is a better known kind.

The Great Gray owl is found throughout the year along the lower Columbia river, and often seen hunting birds, rabbits, etc., toward sunset or early in the morning, being able to see in a stronger light than those kinds with larger eyes, such as the Great Horned owl. Nests have been found only in tall trees,

constructed like those of a hawk, and perhaps were old hawks' nests, as other kinds of owls are known to use such nests when they cannot find a suitable hollow tree. The eggs are described in the "History of North American Birds," by Dr. Brewer, as being about two and a fourth by one and three-fourth inches in size, oblong, oval, and dull white, the number in a nest three or four only. The owl is apparently a very quiet species, no record being given of any cries uttered by them, except that one, kept in confinement, made a tremulous note like that of the common little cat owl or screech owl smaller than a pigeon. This silence, combined with a perfectly noiseless flight, assists them in surprising their prey, which might otherwise escape their daylight attacks. Though not known to prey on domestic fowls, they would no doubt do so in the southern part of their range where fowls are kept. In Alaska, the Indians often steal up to them when they are asleep and catch them by hand. Even the savages, however, do not often eat fowls, perhaps more from superstitious reasons than want of appetite.

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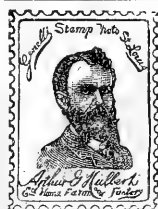
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